

Nelson, Bettie L

From: Larson, Lynn E.
Sent: Monday, June 28, 1999 9:34 AM
To: Werley, Michael S.; Solana, Rick P.; Shulleeta, Maria; Patskan, George J.; McAlpin, Loreen; Cox, Richard H.; Carmines, Edward L.; Carchman, Richard
Subject: ISI Smoking and Health Search for the week of June 27th 1999

Language: EN English
Author: De Andrade, M
Author: Amos, CI
Author: Foulkes, TD

Title: Segregation analysis of squamous cell carcinoma of the head and neck: evidence for a major gene determining risk

Journal/Book Title: ANNALS OF HUMAN GENETICS, 6

Year: 1998

Type: ARTICLE

Abstract: We and others have shown that a family history of squamous cell carcinoma of the head and neck (SCCHN) is a risk factor for this disease. We performed a segregation analysis on a dataset comprised of 1429 first-degree relatives of 242 unselected cases of SCCHN and 934 first-degree relatives of 156 spouse controls. Using the SAGE software, we demonstrated that a Mendelian model was favored and a model postulating a purely environmental cause of SCCHN was rejected. The model suggests that 18% of the population who smoke and drink are susceptible. The lifetime risk for non-smokers and non-drinkers who are heterozygotes for the susceptible allele is close to zero, but for those heterozygotes who smoke and drink the risk is 14% by age 70. These findings suggest that specific genetic factors account for a significant fraction of the risk of SCCHN associated with a family history of SCCHN.

Corporate Source: McGill Univ Montreal PQ Canada H3G 1A4 AP

Corporate Source: Univ Texas Houston TX USA 77030 AP

Corporate Source: McGill Univ Montreal PQ Canada H3G 1A4 AP

Subjects: FIRST-DEGREE RELATIVES

Subjects: MENDELIAN INHERITANCE

Subjects: FAMILY HISTORY

Subjects: LUNG-CANCER

Subjects: SMOKING

Subjects: BRAZIL

Source: ANNALS OF HUMAN GENETICS v.62 is.2 NOV pp.505-510

Language: EN English
Author: Barnes, S

Title: Phytoestrogens and breast cancer

Journal/Book Title: BAILLIERES CLINICAL ENDOCRINOLOGY AND METABOLISM

Year: 1998

Type: REVIEW

Abstract: Phytoestrogens are paradoxical. Because of their structural similarity to the physiological oestrogens, they have been assumed to increase the risk of breast cancer. However, nations where the largest amounts of phytoestrogens are consumed in the diet have the lowest incidence of and rate of death from breast cancer. Although these epidemiological observations do not prove that phytoestrogens have anti-cancer properties, many preclinical experiments support this concept. Some indicate that early life exposure to phytoestrogens may be critical for breast cancer prevention. Clinical studies to define the effect of phytoestrogens on breast cancer recurrence are underway. The recent discovery of a second class of oestrogen receptors, with a differential distribution among the tissues, may enable an explanation of the phytoestrogen paradox. These receptors have opened a way of utilizing phytoestrogens in the treatment of oestrogen-sensitive chronic diseases such as atherosclerosis and osteoporosis.

Corporate Source: Univ Alabama Birmingham AL USA 35294 AP

Subjects: ESTROGEN-RECEPTOR-ALPHA

Subjects: HEMORRHAGIC TELANGIECTASIA TYPE-1

Subjects: SUPPRESSES MAMMARY-CANCER

Subjects: SOY ISOFLAVONE GENISTEIN

Subjects: GROWTH-FACTOR RECEPTOR

Subjects: CELLS IN-VITRO
Subjects: BIOCHEMICAL TARGETS
Subjects: SOYBEAN ISOFLAVONES
Subjects: MAMMALIAN LIGNANS
Subjects: PHYTO-ESTROGENS
Source: BAILLIERES CLINICAL ENDOCRINOLOGY AND METABOLISM v.12
is.4 DEC pp.559-579

Language: EN English
Author: Adlercreutz, M

Title: Epidemiology of phytoestrogens

Journal/Book Title: BAILLIERES CLINICAL ENDOCRINOLOGY AND METABOLISM

Year: 1998

Type: REVIEW

Abstract: Epidemiological studies have revealed that high levels of lignans and isoflavonoids are frequently associated with low breast, prostate and colon cancer risk, as well as a low risk of coronary heart disease. These compounds seem to be cancer protective and/or are biomarkers of a 'healthy' diet. All soy protein products consumed by Asian populations have high concentrations of isoflavonoids. In other countries, such as Finland and Sweden, the lignan levels are higher in populations with the lowest risk because of a high consumption of whole-grain rye bread, berries and some vegetables. There is a strong association between fibre intake per kilogram body weight and lignan concentrations in body fluids. Breast cancer has been found to be associated with low lignan levels in the USA, Finland, Sweden and Australia. With regard to prostate and colon cancer, as well as coronary heart disease, the epidemiological data related to phytoestrogens are still very limited.

Corporate Source: Univ Helsinki Helsinki Finland FI-00014 BC

Subjects: CHROMATOGRAPHY MASS-SPECTROMETRY

Subjects: COMMUNITY-BASED POPULATION

Subjects: PROSTATE-SPECIFIC ANTIGEN

Subjects: BREAST-CANCER CELLS

Subjects: COLON-CANCER

Subjects: PHYTO-ESTROGENS

Subjects: DIETARY FIBER

Subjects: ISOFLAVONOID PHYTOESTROGENS

Subjects: URINARY-EXCRETION

Subjects: MAMMARY-CANCER

Source: BAILLIERES CLINICAL ENDOCRINOLOGY AND METABOLISM v.12
is.4 DEC pp.605-623

Language: EN English

Author: Messina, M

Author: Bennink, M

Title: Soyfoods, isoflavones and risk of colonic cancer: a review of the in vitro and in vivo data

Journal/Book Title: BAILLIERES CLINICAL ENDOCRINOLOGY AND METABOLISM

Year: 1998

Type: REVIEW

Abstract: Soy foods and soybean components have received considerable attention of late for their potential role in reducing cancer risk. Although the relationship between soy intake and the risk of breast and prostate cancer has been the focus of most interest, the relationship between soy intake and other cancers, including colorectal cancer, has also been studied. Several anti-carcinogens have been identified in soybeans, but most enthusiasm for the potential anti-cancer effects of soy undoubtedly stems from work involving soybean isoflavones. Isoflavones have a limited distribution in nature, and, for practical purposes, soyfoods are the only nutritionally relevant dietary source of these phytochemicals. Isoflavones are weak oestrogens but possess other potentially important biological attributes independent of their ability to bind to the oestrogen receptor. The isoflavone genistein inhibits the growth of most types of hormone-dependent and hormone-independent cancer cells in vitro, including colonic cancer cells. Several mechanisms for the in vitro anti-cancer effects of genistein have been proposed, including effects on signal transduction. A number of epidemiological studies, primarily of Asian origin, have examined the relationship between soy intake and the risk of colorectal cancer. Although these studies provide little support for a protective effect of soy, concerns have been raised about the completeness of the soy intake data, since soy was not the focus of these studies and most of this research was conducted prior to the recent interest in the anti-cancer effects of soy. The effect of soy/isoflavone intake has also been studied in rodents, but again these data are conflicting and provide only modest support for a protective effect. Although the relationship between soy intake and colonic cancer risk is certainly worthy of further investigation, there is, at the moment, very limited support for soy exerting a protective effect against this type of cancer.

Corporate Source: Michigan State Univ E Lansing MI USA 48824 AP
Corporate Source: Loma Linda Univ Loma Linda CA USA 92350 AP

Subjects: GENISTEIN INHIBITS PROLIFERATION
Subjects: POSTMENOPAUSAL HORMONE USE
Subjects: TYROSINE KINASE INHIBITOR
Subjects: CELL-CYCLE PROGRESSION
Subjects: LARGE-BOWEL CANCER
Subjects: BREAST-CANCER
Subjects: COLORECTAL-CANCER
Subjects: IN-VITRO
Subjects: LEUKEMIA-CELLS
Subjects: PHYTO-ESTROGENS
Source: BAILLIERES CLINICAL ENDOCRINOLOGY AND METABOLISM v.12
is.4 DEC pp.707-728

Language: EN English

Author: Mazur, W

Title: Phytoestrogen content in foods

Journal/Book Title: BAILLIERES CLINICAL ENDOCRINOLOGY AND METABOLISM

Year: 1998

Type: ARTICLE

Abstract: Plants abound in essential phytochemicals produced for their various vital functions. The same compounds seem also to be crucial for human health and disease. Recent human epidemiological and laboratory animal and cell studies on cancer and heart disease have highlighted the phytoestrogens-naturally occurring principles that share with steroidal oestrogens an ability to activate oestrogen receptors. The best known non-steroidal phytoestrogens include the isoflavones daidzein, genistein, formononetin and biochanin A, the coumestan coumestrol, and the lignans secoisolariciresinol and matairesinol. Acknowledging the potentially chemoprotective role of these non-nutrients, we have quantified all biologically important isoflavonoids and lignans in cereals, oilseeds and nuts, legumes, vegetables, fruits, berries and beverages such as tea, coffee and wine. In this chapter, we present a review of our studies on staple plant foods, indicating that plants contain, besides a wide range of chemicals with a number of biological properties, biologically active phytoestrogens-precursors of hormone-like compounds found in mammalian systems.

Corporate Source: Univ Helsinki Helsinki Finland SF-00100 BC

Subjects: MASS-SPECTROMETRIC METHOD
Subjects: DRINKING GREEN TEA
Subjects: DIETARY PHYTOESTROGENS
Subjects: ALLIUM VEGETABLES
Subjects: WESTERN DISEASES
Subjects: VEGETARIAN WOMEN
Subjects: PHYTO-ESTROGENS
Subjects: SOYBEAN FOODS
Subjects: UNITED-STATES
Subjects: CANCER
Source: BAILLIERES CLINICAL ENDOCRINOLOGY AND METABOLISM v.12
is.4 DEC pp.729-742

Language: EN English

Author: Lin, KC

Author: Faeth, GM

**Title: Shapes of nonbuoyant round luminous laminar-jet
diffusion flames in coflowing air**

Journal/Book Title: AIAA JOURNAL

Year: 1999

Type: ARTICLE

Abstract: The shapes (luminous flame boundaries) of steady nonbuoyant round luminous hydrocarbon-fueled laminar-jet diffusion flames burning in coflowing air were studied both experimentally and theoretically. Flame shapes were measured from photographs of flames burning at low pressures in order to minimize the effects of buoyancy. Test conditions involved acetylene-, propylene- and 1,3-butadiene-fueled flames having initial reactant temperatures of 300 K, ambient pressures of 19-50 kPa, jet-exit Reynolds numbers of 18-121, and initial air/fuel velocity ratios of 0.22-32.45 to yield luminous flame lengths of 21-108 mm. The present flames were close to the laminar smoke point but were not soot emitting. Simple expressions to estimate the shapes of nonbuoyant laminar-jet diffusion flames in coflow were found by extending an earlier analysis of Mahalingam et al, (Mahalingam, S., Ferziger, J. H., and Cantwell, B. J., "Self-Similar Diffusion Flames," Combustion and Flame, Vol. 82, No. 2, 1990, pp, 231-234). These formulas provided a good correlation

of present measurements except near the burner exit where self-similar approximations used in the simplified analysis are no longer appropriate.

Corporate Source: Univ Michigan Ann Arbor MI USA 48109 AP
Subjects: SOOTING BEHAVIOR
Subjects: ACETYLENE
Subjects: PREDICTION
Subjects: SIZES
Source: AIAA JOURNAL v.37 is.6 JUN pp.759-765

Language: EN English
Author: Slutske, WS
Author: True, WR
Author: Scherrer, JF
Author: Heath, AC
Author: Bucholz, KK
Author: Eisen, SA
Author: Goldberg, J
Author: Lyons, MJ
Author: Tsuang, MT

Title: The heritability of alcoholism symptoms: "Indicators of genetic and environmental influence in alcohol-dependent individuals" revisited

Journal/Book Title: ALCOHOLISM-CLINICAL AND EXPERIMENTAL RESEARCH
Year: 1999
Type: ARTICLE

Abstract: There is consistent evidence from twin and adoption studies implicating genetic factors in the etiology of alcoholism, yet few studies have examined the role of genetic influences on individual symptoms of alcoholism. In a previous study of 113 male twins, Johnson et al. (1996a) identified 7 alcoholism symptoms that were more "genetic" and 14 that were more "environmental" (that is, non-genetic) in their etiology by examining symptom concordances among monozygotic and dizygotic twin pairs. The present study represents an attempt to replicate the results of this previous study and extend them by estimating the contribution of genetic factors to the variation in liability for different alcoholism symptoms. Subjects were 3356 male twin pairs from the Vietnam Era Twin Registry. Lifetime histories of alcoholism symptoms were assessed by a structured psychiatric telephone interview. The results of the previous study were not replicated. The correlations between symptom classifications as genetic and non-genetic in the present and previous study were nonsignificant and ranged from -0.27 to 0.11. However, within the present study the correlation between symptom classifications as genetic and non-genetic was statistically significant across random split-half subsamples ($r = 0.59$); nine alcoholism symptoms were consistently classified as genetic and six symptoms as non-genetic in their etiology. Model-fitting analyses applied to different alcoholism symptoms yielded heritability estimates ranging from 0.03 to 0.53 with broad and overlapping confidence intervals around these estimates, ranging from 0.00 to 0.65. The results of this study highlight the difficulty of identifying more or less heritable phenotypes in twin research, and suggest that it may not be possible to identify specific alcoholism symptoms that are more genetic in their etiology than others. Nevertheless, there appears to be potentially important variation in the relative magnitude of genetic influences for individual alcoholism symptoms, and exploring these differences may lead to further insights into the nosology and etiology of alcohol-related problems.

Corporate Source: Univ Missouri Columbia MO USA 65211 AP
Corporate Source: St Louis Univ St Louis MO USA 63103 AP
Corporate Source: St Louis Dept Vet Affairs Med Ctr St Louis MO USA
Corporate Source: Washington Univ St Louis MO USA 63110 AP
Corporate Source: Washington Univ St Louis MO USA 63110 AP
Corporate Source: Univ Illinois Chicago IL USA
Corporate Source: Dept Vet Affairs Hines IL USA
Corporate Source: Boston Univ Boston MA USA 02215 AP
Corporate Source: Harvard Univ Boston MA USA 02115 AP
Corporate Source: Harvard Inst Psychiat Epidemiol & Genet Boston MA USA
Corporate Source: Harvard Univ Boston MA USA 02115 AP
Subjects: TWIN VET REGISTRY
Subjects: MILITARY PERSONNEL
Subjects: MALE VETERANS
Subjects: PSYCHIATRIC-DISORDERS
Subjects: PROBLEM DRINKING
Subjects: UNITED-STATES
Subjects: DRUG-ABUSE
Subjects: END-POINTS
Subjects: VIETNAM

Subjects: PREVALENCE
Source: ALCOHOLISM-CLINICAL AND EXPERIMENTAL RESEARCH v.23
is.5 MAY pp.759-769

Language: EN English
Author: Liguori, A
Author: D'Agostino, RB
Author: Dworkin, SI
Author: Edwards, D
Author: Robinson, JH
Title: Alcohol effects on mood, equilibrium, and simulated driving

Journal/Book Title: ALCOHOLISM-CLINICAL AND EXPERIMENTAL RESEARCH

Year: 1999

Type: ARTICLE

Abstract: Background: The effects of alcohol on simple versus complex psychomotor performance were compared in 18 adults. Abstract: Methods: Subjects received ethanol doses of 0.0, 0.5, and 0.8 g/kg in a randomized, double-blind, within-subject design. Forty minutes after finishing their drinking, the subjects completed a 60-min battery of tests that included: 1) a sensory organization posturography test (EquiTest(R)); 2) latency to apply the brake after appearance of a barrier in a driving simulator (brake reaction time); 3) visual analog subjective-effects scales (VAS); 4) the Profile of Mood States (POMS); 5) critical flicker fusion (CFF); and 6) choice reaction time (CRT), Abstract: Results: Alcohol dose dependently reduced composite equilibrium scores and increased brake reaction time. On the CRT task, total reaction time was significantly increased after the high dose but not the low dose. Alcohol dose dependently increased VAS "dizzy," "high," and "drug effect" ratings. The POMS and CFF were not significantly affected by alcohol. Abstract: Conclusions: These data suggest that an ethanol dose that neither influences certain mood states nor impairs simple psychomotor task performance nonetheless may impair equilibrium and complex psychomotor tasks (e.g., driving).

Corporate Source: Wake Forest Univ Winston Salem NC USA 27104 AP

Corporate Source: Wake Forest Univ Winston Salem NC USA 27109 AP

Corporate Source: RJ Reynolds Tobacco Co Winston Salem NC USA 27102

AP

Subjects: PSYCHOMOTOR PERFORMANCE

Subjects: COGNITIVE FUNCTION

Subjects: FREQUENCY CFF

Subjects: ETHANOL

Subjects: DRUGS

Subjects: IMPAIRMENT

Source: ALCOHOLISM-CLINICAL AND EXPERIMENTAL RESEARCH v.23
is.5 MAY pp.815-821

Language: EN English
Author: Day, NL
Author: Zuo, YL
Author: Richardson, GA
Author: Goldschmidt, L
Author: Larkby, CA
Author: Cornelius, MD
Title: Prenatal alcohol use and offspring size at 10 years of age

Journal/Book Title: ALCOHOLISM-CLINICAL AND EXPERIMENTAL RESEARCH

Year: 1999

Type: ARTICLE

Abstract: The Maternal Health Practices and Child Development Project is a longitudinal study of the effects of prenatal exposure to alcohol and other substances. Women were selected from a prenatal clinic and interviewed at the 4th and 7th months of pregnancy. Their offspring were examined at delivery, at 8 and 18 months, and at 3, 6, and 10 years. This report examined 610 offspring, at age 10, who were exposed prenatally to alcohol. Most alcohol use in this low-income cohort was light to moderate, although the entire spectrum of alcohol use is represented. The weight, length, head circumference, and skinfold thickness of the offspring were measured. At each assessment phase, we found a significant association between size and prenatal exposure to alcohol. At age 10, the children who were prenatally exposed to alcohol continued to be significantly smaller in weight, height, head circumference, and skinfold thickness. These results indicate that prenatal alcohol exposure has a long-term impact on offspring growth.

Corporate Source: Univ Pittsburgh Pittsburgh PA USA

Corporate Source: Univ Pittsburgh Pittsburgh PA USA

Corporate Source: Minitab Inc State Coll PA USA

Subjects: EXPOSURE

Subjects: GROWTH

Subjects: PREGNANCY

Subjects: BIRTH

Subjects: MORPHOLOGY

Subjects: PREDICTORS

Subjects: CAFFEINE

Subjects: TOBACCO

Subjects: SMOKING

Subjects: WOMEN

Source: ALCOHOLISM-CLINICAL AND EXPERIMENTAL RESEARCH v.23
is.5 MAY pp.863-869

Language: EN English

Author: Pettis, JS

Author: Shimanuki, H

Title: A hive modification to reduce varroa populations

Journal/Book Title: AMERICAN BEE JOURNAL

Year: 1999

Type: ARTICLE

Abstract: A simple modification to the hive bottom board was tested as a non-chemical or cultural control method for varroa mites. Wire mesh hardware cloth was used to replace the majority of the surface area of the bottom board underneath the brood area, allowing varroa to fall through and potentially excluding them from reentering the colony. Thirty colonies received no chemical treatment but were fitted with screen bottom boards, sticky boards or normal bottom boards. Mite fall was monitored in these colonies on a monthly basis and revealed approximately 14% and 28% lower mite fall in the two modified bottom boards compared to the normal bottom board in June and July, respectively. However, by September mite levels in all three sets of colonies had reached damaging levels. Thus, the bottom board modification slowed the growth rate of varroa, but is not sufficient alone. Mite invasion pressure into colonies was monitored using Apistan(R) in three colonies and increased in August and September to greater than 100 mites per colony over a three day period. This level of invasion surely added to the decline of all colonies. A modified bottom board that allows varroa to fall through and prevents direct contact with bees showed promise in the current studies by slowing varroa populations and is proposed as a cultural control. Additionally, colonies with mesh bottom boards had significantly more sealed brood than colonies on normal bottom boards, an added benefit to using this hive modification. The use of a screen bottom board or screen insert in conjunction with resistant lines of bees, smoke, dusts, or other control agents should provide a more integrated approach to varroa control and could reduce the number of chemical treatments required.

Corporate Source: ARS Beltsville MD USA 20705 AP

Subjects: JACOBSONI OUDEMANS

Subjects: HONEY-BEE

Subjects: RESISTANCE

Subjects: MITE

Subjects: OUD

Source: AMERICAN BEE JOURNAL v.139 is.6 JUN pp.471-473

Language: EN English

Author: Ornstein, SM

Author: Jenkins, RG

Title: Quality of care for chronic illness in primary care:

Opportunity for improvement in process and outcome measures

Journal/Book Title: AMERICAN JOURNAL OF MANAGED CARE

Year: 1999

Type: ARTICLE

Abstract: Objective: To describe adherence to a number of quality indicators and clinical outcomes for asthma, diabetes mellitus, hypertension, coronary heart disease, atrial fibrillation, and cerebrovascular disease in the primary care practices of the Practice Partner Research Network (PPRNet). **Abstract:** Study Design: Cross-sectional epidemiologic design. Patients and Methods: PPRNet is a national research network of ambulatory, mostly primary care practices that use the Practice Partner Patient Records(TM) electronic medical records. Participating practices send anonymous clinical data on patients to the PPRNet data center monthly. Standard database management and statistical software are used to compile practice reports. These reports include measures of adherence to process and

outcome measures for chronic illnesses, the subject of this report.

Abstract: Results: Forty-eight PPRNet practices provided data for the first quarter of 1998. A total of 336,401 patients were active in these practices during this quarter. At least 2000 active patients had each of the conditions studied. Wide variation in guideline adherence among PPRNet practices was present for each of the performance measures. Better performance was present for physical examination measures and laboratory monitoring than for treatment interventions. Overall performance was excellent for blood pressure monitoring, poor for lipid monitoring in patients with CHD, and intermediate for glycosylated hemoglobin monitoring in patients with diabetes mellitus.

Abstract: Conclusion: The findings of this study are comparable to others in documenting that most clinical practice guidelines for chronic illness are not followed for a majority of patients and that large majorities do not reach desired clinical outcomes.

Corporate Source: Med Univ S Carolina Charleston SC USA 29425 AP

Corporate Source: Med Univ S Carolina Charleston SC USA 29425 AP

Subjects: HEALTH-SERVICES RESEARCH

Subjects: GLYCEMIC CONTROL

Subjects: MEDICAL RECORDS

Subjects: HEART-DISEASE

Subjects: MANAGED-CARE

Subjects: HYPERTENSION

Subjects: GUIDELINES

Subjects: STANDARDS

Subjects: PHYSICIAN

Subjects: ADHERENCE

Source: AMERICAN JOURNAL OF MANAGED CARE v.5 is.5 MAY
pp.621-627

Language: EN English

Author: Shaw, GM

Author: Todoroff, K

Author: Finnell, RH

Author: Rozen, R

Author: Lammer, EJ

**Title: Maternal vitamin use, infant C677T mutation in MTHFR,
and isolated cleft palate risk**

Journal/Book Title: AMERICAN JOURNAL OF MEDICAL GENETICS

Year: 1999

Type: LETTER

Corporate Source: Calif Birth Defects Monitoring Program Emeryville CA
USA 94608 AP

Corporate Source: Texas A&M Univ Amarillo TX USA

Corporate Source: McGill Univ Montreal PQ Canada H3H 1P3 AP

Corporate Source: McGill Univ Montreal PQ Canada H3H 1P3 AP

Corporate Source: McGill Univ Montreal PQ Canada H3H 1P3 AP

Corporate Source: Childrens Hosp Oakland CA USA 94609 AP

Subjects: METHYLENETETRAHYDROFOLATE REDUCTASE

Subjects: CIGARETTE-SMOKING

Subjects: SPINA-BIFIDA

Subjects: ALPHA GENE

Subjects: LIP

Source: AMERICAN JOURNAL OF MEDICAL GENETICS v.85 is.1 JUL 2
pp.84-85

Language: EN English

Author: Garcia-Closas, M

Author: Herrero, R

Author: Bratti, C

Author: Hildesheim, A

Author: Sherman, ME

Author: Morera, LA

Author: Schiffman, M

Title: Epidemiologic determinants of vaginal pH

Journal/Book Title: AMERICAN JOURNAL OF OBSTETRICS AND GYNECOLOGY

Year: 1999

Type: ARTICLE

Abstract: OBJECTIVES: This study was undertaken to evaluate the relationship between vaginal pH and factors related to cervical cancer.

Abstract: STUDY DESIGN: In a population-based sample of 9161 women from Guanacaste Province in Costa Rica women were categorized into 2 groups, those with vaginal pH in the reference range (4.0-4.5) and those with elevated vaginal pH (5.0-5.5). Odds ratios were used to estimate the relationship between elevated pH and its potential determinants.

Abstract: RESULTS: Aging was strongly associated with increasing vaginal pH, starting at around 45 years of age and continuing into old age. Menopause was responsible for an additional 1.7-fold increase in the odds of having an elevated pH (odds ratio 1.7, 95% confidence interval 1.4-2.0). Human papillomavirus infection and cervical intraepithelial neoplasia were not associated with changes in pH.

Abstract: CONCLUSIONS: Our data indicate that vaginal pH is strongly related to age and to menopausal status and thus could be a marker of age-related hormonal changes. Elevated pH does not appear to be associated with risk of high-grade intraepithelial neoplasia among women infected with human papillomavirus.

Corporate Source: NCI Rockville MD USA 20892 AP

Corporate Source: Johns Hopkins Med Inst Baltimore MD USA 21205 AP

Corporate Source: Int Agcy Res Canc Lyon France F-69372 BC

Subjects: POST-MENOPAUSAL WOMEN

Subjects: BACTERIAL VAGINOSIS

Subjects: CERVICAL-CANCER

Subjects: POSTMENOPAUSE

Subjects: CYTOLOGY

Source: AMERICAN JOURNAL OF OBSTETRICS AND GYNECOLOGY v.180
is.5 MAY pp.1060-1066

Language: EN English

Author: Palmer, SK

Author: Moore, LG

Author: Young, DA

Author: Cregger, B

Author: Berman, JC

Author: Zamudio, S

**Title: Altered blood pressure course during normal pregnancy
and increased preeclampsia at high altitude (3100
meters) in Colorado**

Journal/Book Title: AMERICAN JOURNAL OF OBSTETRICS AND GYNECOLOGY

Year: 1999

Type: ARTICLE

Abstract: OBJECTIVE: Our purpose was to determine the case incidences of preeclampsia at low and high altitudes and whether maternal blood pressure course during pregnancy differs between low and high altitudes.

Abstract: STUDY DESIGN: This was a retrospective cohort study of pregnancies in sociodemographically matched communities at low and high altitudes in Colorado; each community had a small hospital served by family practitioners and was located >100 miles from major urban areas. Included were consecutive singleton pregnancies of women without chronic disease that resulted in live-born infants at >28 weeks' gestation during an 18-month period ($n = 116$ at 1260 m, $n = 93$ at 3100 m). Clinic and hospital medical records were searched and data pertaining to hypertensive complications of pregnancy and serial blood pressure measurements were abstracted.

Abstract: RESULTS: Despite similar maternal risk factors, the case incidences of preeclampsia were 16% at 3100 m and 3% at 1260 m. As in sea-level pregnancies, mean blood pressure fell until week 20 in normotensive pregnancy at 1260 m. Mean pressure rose linearly, however, in normotensive women at 3100 m and in women with preeclampsia at both 1260 m and 3100 m. High altitude acted independently of known risk factors and yielded an odds ratio for preeclampsia of 3.6 (95% confidence interval 1.1-11.9). Birth weight was 285 g lower at 3100 m despite similar gestational ages.

Abstract: CONCLUSION: The normal pregnancy-associated fall in blood pressure was absent at 3100 m, even in women who remained normotensive. The incidence of preeclampsia was increased at high altitude. Residence at high altitude interferes with the normal vascular adjustments to pregnancy, increasing the incidence of preeclampsia, and is perhaps analogous to other conditions that decrease uteroplacental oxygen delivery.

Corporate Source: Univ Colorado Denver CO USA 80262 AP

Corporate Source: Univ Colorado Denver CO USA 80262 AP

Corporate Source: Univ Colorado Denver CO USA 80262 AP

Corporate Source: Univ Colorado Denver CO USA 80202 AP

Subjects: RISK-FACTORS

Subjects: BIRTH-WEIGHT

Subjects: HYPERTENSION

Subjects: HEALTHY

Subjects: WOMEN

Source: AMERICAN JOURNAL OF OBSTETRICS AND GYNECOLOGY v.180
is.5 MAY pp.1161-1168

Language: EN English

Author: Cope, GF

Title: Cotinine levels in women who smoke during pregnancy

Journal/Book Title: AMERICAN JOURNAL OF OBSTETRICS AND GYNECOLOGY

Year: 1999

Type: LETTER

Subjects: URINE

Source: AMERICAN JOURNAL OF OBSTETRICS AND GYNECOLOGY v.180
is.5 MAY pp.1310-1310

Language: EN English

Author: Rebagliato, M

Author: Bolumar, F

Author: Hernandez-Aguado, I

Title: Cotinine levels in women who smoke during pregnancy -

Reply

Journal/Book Title: AMERICAN JOURNAL OF OBSTETRICS AND GYNECOLOGY

Year: 1999

Type: LETTER

Corporate Source: Univ Miguel Hernandez San Juan Alicante Spain 03550
AC

Source: AMERICAN JOURNAL OF OBSTETRICS AND GYNECOLOGY v.180
is.5 MAY pp.1310-1310

Language: EN English

Author: Rasanen, P

Author: Hakko, H

Author: Isohanni, M

Author: Hodgins, S

Author: Jarvelin, MR

Author: Tiihonen, J

**Title: Maternal smoking during pregnancy and risk of criminal
behavior among adult male offspring in the northern
Finland 1966 birth cohort**

Journal/Book Title: AMERICAN JOURNAL OF PSYCHIATRY

Year: 1999

Type: ARTICLE

Abstract: Objective: The goal of this study was to test the hypothesis that maternal smoking during pregnancy is associated with greater risk for criminal behavior of the offspring in adulthood. Method: An unselected, general population cohort composed of 11,017 subjects (5,636 men, 5,381 women) was followed up prospectively from the sixth month of pregnancy to age 28 years. Interviews with the mother during the pregnancy, health records, and an assessment of the offspring at age 1 year provided information on risk factors. The Ministry of Justice provided information on criminal offenses for all subjects. Results: Because of the low rate of criminal offenses among women, the present analyses are restricted to men (N=5,636). Compared to the sons of mothers who did not smoke, the sons of mothers who smoked during pregnancy had more than a twofold risk of having committed a violent crime or having repeatedly committed crimes, even when other biopsychosocial risk factors were controlled. While maternal smoking during pregnancy alone explained 4% of the variance associated with violent offenses among male offspring, it was not significantly associated with nonviolent offenses among male offspring. When maternal smoking during pregnancy was combined with a maternal age of less than 20 years, a single-parent family, an unwanted pregnancy, and a developmental lag in walking or talking, the odds ratios for violent offenses increased up to ninefold and for persistent offenses up to 14-fold. Conclusions: Maternal smoking during pregnancy is associated with violent offenses and persistent offenses, but not with nonviolent offenses, among male offspring in adulthood.

Corporate Source: Univ Kuopio Kuopio Finland FIN-70240 BC

Corporate Source: Univ Oulu Oulu Finland

Corporate Source: Univ Oulu Oulu Finland

Corporate Source: Imperial Coll London England

Corporate Source: Univ Montreal Montreal PQ Canada H3C 3J7 AP

Subjects: HOMICIDE RECIDIVISM

Subjects: HEALTHY-VOLUNTEERS

Subjects: NICOTINE EXPOSURE
Subjects: VIOLENT OFFENDERS
Subjects: FIRE SETTERS
Subjects: FOLLOW-UP
Subjects: COMPLICATIONS
Subjects: SCHIZOPHRENIA
Subjects: ASSOCIATION
Subjects: DELINQUENCY
Source: AMERICAN JOURNAL OF PSYCHIATRY v.156 is.6 JUN
pp.857-862

Language: EN English
Author: Stevens, NA
Author: Borgerding, MF

Title: GC-AED studies of nicotine fate in a burning cigarette

Journal/Book Title: ANALYTICAL CHEMISTRY

Year: 1999

Type: ARTICLE

Abstract: An atomic emission detector (AED) for a gas chromatograph (GC) can be used to selectively detect compounds labeled with stable isotopes, such as D, C-13, and N-15. This capability can be used to determine precursor-fate relationships within complex matrices, using stable isotopes rather than radiolabeled isotopes. Employing stable isotopes removes the safety consideration associated with radiolabeling studies. Two previous reports have employed GC-AED in fate studies for C-13-labeled precursors. The goal of this study was to evaluate the utility of GC-AED for precursor-fate determinations in tobacco science; In this work, GC-AED was used to determine the fate of nicotine-d(4) in a burning cigarette. GC-MSD was then employed to identify the compounds that the AED indicated contained D. Spectral confirmation of the presence of D was performed on each chromatographic peak of interest with both AED and MSD to ensure that the identification of the products was correct. Nicotine and nicotine-de standards were used to evaluate the effect of coelution of unlabeled compounds with the labeled compounds on the AED response for D. It was shown that the AED response for D at $\lambda = 308$ nm decreases with increased concentration of unlabeled compound. Detection at $\lambda = 656$ nm, however, is unaffected by the presence of the unlabeled compound. Compound-independent calibration is also possible at this wavelength. GC-AED studies with nicotine-d(4) core injected into cigarettes demonstrated that most of the nicotine (79%) is distilled; unchanged, into the mainstream (MS) and sidestream (SS) smoke. The degradation products that do occur include 3-substituted pyridines and nicotine-oxidation products. These are found only in the SS smoke.

Corporate Source: Virginia Polytech Inst & State Univ Blacksburg VA USA
24061 AP

Subjects: ATOMIC-EMISSION DETECTION

Subjects: GAS-CHROMATOGRAPHY

Subjects: METABOLITES

Subjects: C-13

Source: ANALYTICAL CHEMISTRY v.71 is.11 JUN 1 pp.2179-2185

Language: EN English
Author: AbuRahma, AF
Author: Robinson, PA
Author: Stickler, DL

Title: Analysis of regression of postoperative carotid stenosis from prospective randomized trial of carotid endarterectomy comparing primary closure versus patching

Journal/Book Title: ANNALS OF SURGERY

Year: 1999

Type: ARTICLE

Abstract: Background and Purpose Recurrent stenosis after carotid endarterectomy (CEA) has been reported to vary between a few percent and 30%. Regression of recurrent stenosis has been reported sporadically in the literature, but studies analyzing the factors affecting regression are lacking. This study analyzed factors affecting the regression of postoperative stenosis from a prospective randomized trial of CEA comparing primary closure (PC) versus patching. **Abstract:** Patient Population and Methods Three hundred ninety-nine CEAs were randomized into three groups: 135 PCs, 135 polytetrafluoroethylene patch closures (PTFE), and 130 vein patch closures (VPC). Postoperative duplex ultrasounds were done at 1, 6, and 12 months, and then yearly. The subgroup of these CEAs that exhibited postoperative stenosis was followed for possible regression of the stenosis. Analyses of various risk factors were examined for possible association

with regression of recurrent stenosis. Mean follow-up was 46 months.

Abstract: Results Of 105 postoperative stenoses, regression was noted in 6/64 (9%) in PC, 6/13 (46%) in PTFE, and 10/28 (36%) in VPC. Overall, 22 recurrent stenoses regressed; 19 regressed to normal and 3 regressed from 50% to 80% stenosis to 20% to <50% stenosis. The mean time to regression was 383 days. Regression was more common in patching than PC. Both VPC and PTFE had significantly more regression than PC. When stenoses of 50% to 80% were analyzed, patching had more regression than PC. None of the recurrent stenoses greater than or equal to 80% regressed. There was no association between regression and other factors, including gender, hypertension, diabetes mellitus, coronary artery disease, smoking, internal carotid artery diameter, hyperlipidemia, hypercholesterolemia, or aspirin intake. Abstract: Conclusions Regression of recurrent stenosis was associated more strongly with patching than with PC. There was no association between regression and other factors.

Corporate Source: W Virginia Univ Charleston WV USA 25304 AP

Corporate Source: Boehringer Ingelheim Pharmaceut Inc Ridgefield CT USA
06877 AP

Subjects: TERM FOLLOW-UP

Subjects: RECURRENT

Subjects: RESTENOSIS

Subjects: ARTERY

Subjects: ANGIOPLASTY

Source: ANNALS OF SURGERY v.229 is.6 JUN pp.767-772

Language: EN English

Author: Feliciano, DV

Author: Ojukwu, JC

Author: Rozycki, GS

Author: Ballard, RB

Author: Ingram, WL

Author: Salomone, J

Author: Namias, N

Author: Newman, PG

Title: The epidemic of cocaine-related juxtapyloric perforations - With a comment on the importance of testing for Helicobacter pylori

Journal/Book Title: ANNALS OF SURGERY

Year: 1999

Type: ARTICLE

Abstract: Objective This is a report of 50 consecutive patients with juxtapyloric perforations after smoking "crack" cocaine (cocaine base) at one urban public hospital.

Abstract: Summary Background Data Although the exact causal relation between smoking crack cocaine and a subsequent juxtapyloric perforation has not been defined, surgical services in urban public hospitals now treat significant numbers of male addicts with such perforations. This report describes the patient set, presentation, and surgical management and suggests a possible role for Helicobacter pylori in contributing to these perforations.

Abstract: Methods A retrospective chart review was performed, supplemented by data from the patient log in the department of surgery.

Abstract: Results From 1994 to 1998, 50 consecutive patients (48 men, 2 women) with a mean age of 37 had epigastric pain and signs of peritonitis a median of 2 to 4 hours (but up to 48 hours) after smoking crack cocaine. A history of chronic smoking of crack as well as chronic alcohol abuse was noted in all patients; four had a prior history of presumed ulcer disease in the upper gastrointestinal tract. Free air was present on an upright abdominal x-ray in 84% of patients, and all underwent operative management. A 3- to 5-mm juxtapyloric perforation, usually in the prepyloric area, was found in all patients. Omental patch closure was used in 49 patients and falciform ligament closure in 1. Two patients underwent parietal cell vagotomy as well.

Abstract: In the later period of the review, antral mucosal biopsies were performed through the juxtapyloric perforation in five patients. Urease testing was positive for infection with H. pylori in four, and these patients were prescribed appropriate antimicrobial drugs.

Abstract: Conclusions Juxtapyloric perforations after the smoking of crack cocaine occur in a largely male population of drug addicts who are 8 to 10 years younger than the patient group that historically has perforations in the pyloroduodenal area. These perforations are usually 3 to 5 mm in diameter, and an antral mucosal biopsy for subsequent urease testing should be performed if the location and size of the ulcer allow this to be done safely. Omental patch closure is appropriate therapy for patients without a history of prior ulcer disease; antimicrobial therapy and omeprazole are prescribed when H. pylori is present.

Corporate Source: Grady Mem Hosp Atlanta GA USA 30303 AP

Corporate Source: Emory Univ Atlanta GA USA 30322 AP

Subjects: CRACK COCAINE

Subjects: DUODENAL-ULCERS

Subjects: MISSING LINK

Subjects: ISCHEMIA

Subjects: PATHOPHYSIOLOGY

Subjects: INFARCTION
Subjects: OVERDOSE
Subjects: COLITIS
Subjects: ABUSE
Subjects: MYTH
Source: ANNALS OF SURGERY v.229 is.6 JUN pp.801-804

Language: EN English

Author: Fujimoto, N
Author: Segawa, Y
Author: Takigawa, N
Author: Hotta, K
Author: Kishino, D
Author: Shimono, M
Author: Nakata, M
Author: Saeki, H
Author: Mandai, K
Author: Eguchi, K

Title: Clinical investigation of bronchioloalveolar carcinoma: A retrospective analysis of 53 patients in a single institution

Journal/Book Title: ANTICANCER RESEARCH

Year: 1999

Type: ARTICLE

Abstract: Background: Bronchioloalveolar carcinoma (BAL) has been reported to have unique clinicopathological features. Patients and Methods; This retrospective study was performed using data base including 871 patients treated for primary lung cancer between 1981 and 1995. Results; The patients with BAC included a larger proportion of female ($P = 0.029$) and smoked less ($P = 0.002$) than those with non-BAG. There was no difference in survival between surgically resected patients with BAC and those with non-BAG. Clinical Stage IV patients with BAC had a better response to chemotherapy than did those with non-BAG. Survival in the former group was better than that in the latter on univariate analysis; but the significance of this difference was not confirmed multivariate analysis. Conclusion; The patients with BAG included a larger proportion of females and smoked less than those with non-BAG treatment results for BAG was comparable to those for non-BAG.

Corporate Source: Natl Shikoku Canc Ctr Hosp Matsuyama Ehime Japan
7900007 AP

Corporate Source: Natl Shikoku Canc Ctr Hosp Matsuyama Ehime Japan
7900007 AP

Corporate Source: Natl Shikoku Canc Ctr Hosp Matsuyama Ehime Japan
7900007 AP

Subjects: LUNG-CARCINOMA
Subjects: CELL-CARCINOMA
Subjects: ADENOCARCINOMA
Subjects: CANCER

Source: ANTICANCER RESEARCH v.19 is.2B MAR-APR pp.1369-1373

Language: EN English

Author: Skotnicka-Klonowicz, G
Author: Rieske, P
Author: Bartkowiak, J
Author: Szymik-Kantorowicz, S
Author: Daszkiewicz, P
Author: Debiec-Rychter, M

Title: Loss of heterozygosity of WT1 gene in the prognosis of sporadic Wilms' tumour in children

Journal/Book Title: ANTICANCER RESEARCH

Year: 1999

Type: ARTICLE

Abstract: The aim of this report was to evaluate the prognostic value of allele loss of the WT1 gene in children with sporadic Wilms' tumour. Allele loss of the WT1 gene was evaluated using microsatellite polymorphisms in the 3' untranslated region of WT1 in a radioactive PCR assay. The study comprised 66 children (30 girls and 36 boys), aged from 2 days to 13 years, treated for Wilms' tumour according to the SIOP-09 and PGGL scheme. We have used DNA

isolated from the neoplastic versus normal kidney tissue from the paraffin embedded sections using microdissection procedure. Loss of heterozygosity (LOH) of the WT1 gene was found in 12 children (19.6%), 5 cases were noninformative. No significant correlation could be found between the LOH of WT1 gene and sex and age. Significantly more frequent occurrence of LOH in tumor in low stage of advancement and low degree of malignancy was found. However; no significant effect of LOH of WT1 gene was observed on frequency of recurrences, metastasis and deaths. Study of allele loss of the WT1 gene may be recommended in difficult cases as an additional factor useful for the diagnosis and in the assignment of the tumour to the appropriate risk group.

Corporate Source: Med Univ Lodz Lodz Poland
Corporate Source: Med Univ Lodz Lodz Poland
Corporate Source: Univ Cracovia Krakow Poland
Corporate Source: Med Univ Poznan Poznan Poland

Subjects: CHILDHOOD RENAL TUMORS
Subjects: CHROMOSOME-ABNORMALITIES
Subjects: MOLECULAR-GENETICS
Subjects: EPIDEMIOLOGY
Subjects: FEATURES
Subjects: REGIONS
Subjects: BIOLOGY
Subjects: CANCER

Source: ANTICANCER RESEARCH v.19 is.2B MAR-APR pp.1451-1454

Language: EN English
Author: Mumford, JL
Author: Tian, DF
Author: Younes, M
Author: Hu, FD
Author: Lan, Q
Author: Ostrowski, ML
Author: He, YZ
Author: Feng, ZM

Title: Detection of p53 protein accumulation in sputum and lung adenocarcinoma associated with indoor exposure to unvented coal smoke in China

Journal/Book Title: ANTICANCER RESEARCH

Year: 1999

Type: ARTICLE

Abstract: Lung cancer in Xuan Wei (XW), China has been linked to exposure to unvented coal smoke and adenocarcinoma, especially bronchioloalveolar carcinoma, is most common, p53 mutations occur commonly in lung cancers and usually generate detectable levels of p53 protein accumulation. Sputum is noninvasive to collect and ideal for screening p53 abnormalities, p53 protein accumulation was detected by immunohistochemistry in lung tumors and sputa from XW lung cancer patients to determine (1) the role of p53 in lung pathogenesis, and (2) feasibility of detecting p53 protein accumulation in sputum. p53 protein accumulation was detected in 73% (22/30) of lung adenocarcinomas from XW females exposed to coal emissions and significantly higher than the control cases (33%, $p < 0.05$). In sputum, we detected p53 overexpression in tumor cells in 54% (13/24) of XW cases and also in dysplastic cells (50% or 4/8). These findings suggest that p53 abnormalities is important in XW lung cancer etiology.

Corporate Source: US EPA Res Triangle Pk NC USA 27711 AP
Corporate Source: Univ N Carolina Chapel Hill NC USA 27599 AP
Corporate Source: Baylor Coll Med Houston TX USA 77030 AP
Corporate Source: Yunnan Prov First Peoples Hosp Kunming Peoples R China
Corporate Source: Inst Environm Hlth & Engrn Beijing Peoples R China

Subjects: TUMOR-SUPPRESSOR GENE
Subjects: CLINICAL IMPLICATIONS
Subjects: CANCER DETECTION
Subjects: XUAN-WEI
Subjects: EXPRESSION
Subjects: MUTATIONS
Subjects: LESIONS

Source: ANTICANCER RESEARCH v.19 is.2A MAR-APR pp.951-958

Language: EN English
Author: Orui, Y
Author: Ozawa, H

Title: Identification of three major Meloidogyne species by stained spores of host-specific Pasteuria penetrans isolates

Journal/Book Title: APPLIED ENTOMOLOGY AND ZOOLOGY

Year: 1999

Type: ARTICLE

Abstract: A method for identifying individual second-stage juveniles (J2s) of three major Meloidogyne spp. in Japan was developed. Spores of three isolates of Pasteuria penetrans from Meloidogyne incognita (Mi), M. arenaria (Ma) and M. hapla (Mh) were sonicated to increase the number of spores attaching to J2s of Meloidogyne spp., they were then stained blue with Brilliant Blue G, orange with Acridine Orange, and violet with Methyl Violet, respectively. When J2s of Mi, Ma and Mh were mixed with these stained spores, each J2 was identified individually according to the color of the most abundantly attached spores on the body surface. In the case of mixed nematode suspensions containing Meloidogyne spp., free-living nematodes and Pratylenchus sp., the stained spores attached only to J2s of Meloidogyne spp., and the species of each J2 was discriminated by the spore color. This method is also applicable for identifying individual J2s of most populations of Mi, Ma and Mh from Japan, and is useful for estimating the numbers of J2s of each Meloidogyne spp. in mixed-nematode samples.

Corporate Source: Japan Tobacco Inc Oyama Tochigi Japan 3230808 AP

Subjects: NEMATODES

Subjects: PCR

Source: APPLIED ENTOMOLOGY AND ZOOLOGY v.34 is.2 MAY
pp.195-203

Language: EN English

Author: Orui, Y

Author: Mizukubo, T

Title: Discrimination of seven Pratylenchus species (Nematoda : Pratylenchidae) in Japan by PCR-RFLP analysis

Journal/Book Title: APPLIED ENTOMOLOGY AND ZOOLOGY

Year: 1999

Type: ARTICLE

Abstract: Seven Pratylenchus species including P. brachyurus, P. coffeae, P. crenatus, P. neglectus, P. penetrans, P. zeae, and a Pratylenchus sp. which is morphologically indistinguishable from P. coffeae, were compared on the basis of the polymerase chain reaction-restriction fragment length polymorphism (PCR-RFLP) analysis using a single nematode. The PCR primers used amplified the two internal transcribed spacer (ITS) regions, i.e. the 5.8S gene, and small portions of the 18S and 28S genes of the ribosomal DNA (rDNA). The isolates of P. penetrans, P. coffeae and Pratylenchus sp. yielded a single fragment after PCR amplification. Each fragment size was about 0.75 kb in P. penetrans, and about 1.1 kb in P. coffeae and Pratylenchus sp. The other nematodes, newly examined in this study, P. brachyurus, P. crenatus, P. neglectus and P. zeae, gave two PCR amplification products. The sizes of the two fragments were about 0.7 kb and 0.75 kb in P. brachyurus, P. neglectus and P. zeae, and about 0.8 kb and 0.9 kb in P. crenatus, respectively. These seven species were easily discriminated according to species-specific patterns by digesting the amplified products with endonucleases, AluI, HhaI, HinfI and TaqI.

Corporate Source: Japan Tobacco Inc Oyama Tochigi Japan 3230808 AP

Corporate Source: Kyushu Natl Agr Expt Stn Kumamoto Japan 8611102 AC

Subjects: FRAGMENT-LENGTH-POLYMORPHISM

Subjects: RIBOSOMAL DNA

Subjects: DITYLENCHUS

Subjects: GENES

Source: APPLIED ENTOMOLOGY AND ZOOLOGY v.34 is.2 MAY
pp.205-211

Language: EN English

Author: Roy, SO

Author: Packard, TT

Author: Berdalet, E

Author: St-Amand, L

Title: Impact of acetate, pyruvate, and physiological state on respiration and respiratory quotients in Pseudomonas nautica

Journal/Book Title: AQUATIC MICROBIAL ECOLOGY

Year: 1999

Type: ARTICLE

Abstract: Physiological rates of CO₂ production and O₂ consumption, and the activities of isocitrate dehydrogenase (IDH) and the electron transfer system (ETS) were studied in the marine bacterium *Pseudomonas nautica* growing on acetate. In exponential growth, IDH and ETS activities were well coupled with CO₂ production and O₂ consumption rates, but in senescence they were uncoupled. Our results clearly show that under starvation conditions, IDH and ETS activities remained high even though their corresponding respiration rates dropped. The respiratory metabolism in the different physiological states of the acetate-grown cultures was compared with previous observations made in pyruvate-grown cultures. Time profiles of CO₂ production and O₂ consumption rates showed completely different respiratory fingerprints associated with the different carbon sources. Acetate-grown cultures showed an increase of respiratory quotients (RQ) in the senescence phase whereas in pyruvate-grown cultures it stayed close to 1.0. On both carbon sources, respiration to respiratory capacity ratios were constant in exponential phase and decreased to almost zero after carbon source exhaustion. Our results clearly show the impact of physiological state and carbon sources on bacterial respiration rates.

Corporate Source: Fisheries & Oceans Canada Mt Joli PQ Canada G5H 3Z4

AP

Corporate Source: CSIC Barcelona Spain E-08039 BC

Subjects: ISOCITRATE DEHYDROGENASE-ACTIVITY

Subjects: BISUBSTRATE ENZYME-KINETICS

Subjects: ESCHERICHIA-COLI

Subjects: CO₂ PRODUCTION

Subjects: BRANCH POINT

Subjects: ETS ACTIVITY

Subjects: BACTERIUM

Subjects: CYCLE

Subjects: CONSUMPTION

Subjects: CARBON

Source: AQUATIC MICROBIAL ECOLOGY v.17 is.1 APR 30 pp.105-110

Language: EN English

Author: Kamimura, M

Author: Takahashi, M

Author: Tomita, S

Author: Fujiwara, H

Author: Kiuchi, M

Title: Expression of ecdysone receptor isoforms and trehalase in the anterior silk gland of *Bombyx mori* during an extra larval molt and precocious pupation induced by 20-hydroxyecdysone administration

Journal/Book Title: ARCHIVES OF INSECT BIOCHEMISTRY AND PHYSIOLOGY

Year: 1999

Type: ARTICLE

Abstract: When newly molted 5th (last) instar larvae of *Bombyx mori* were fed an artificial diet containing 20-hydroxyecdysone (20E), an extra larval molt was induced and the cuticle layer of the anterior silk gland was renewed. In contrast, feeding 20E to 5th instar larvae allatectomized in the mid-4th instar induced pupational responses and anterior silk gland degeneration. Topical application of a juvenile hormone analogue, fenoxycarb, to allatectomized larvae before 20E treatment nullified the effects of allatectomy and induced an extra molt. In the two cases where an extra larval molt was induced, mRNA expression of the ecdysone receptor A isoform (EcR-A) preceded that of the B1 isoform (EcR-B1) in the anterior silk gland, while EcR-A and EcR-B1 were expressed synchronously during precocious pupation. Precedence of EcR-A over EcR-B1 and the synchronization of both are expression patterns observed during the normal 4th and 5th instars. These results suggest that temporal expression profiles of EcR isoforms are important for regulating stage specific responses of this tissue to ecdysteroids. Trehalase was also identified as a metamorphosis-specific gene in the anterior silk gland by mRNA differential display between the extra larval molt and precocious pupation. During normal 4th and 5th instar, trehalase mRNA was expressed at the end of the 5th instar only. Thus, extra larval molt and precocious pupation induced by dietary application of 20E mimic normal larval molt and pupation well and can be a useful tool in isolating stage-specific ecdysteroid-regulated genes. Arch. Insect Biochem. Physiol. 41:79-88, 1999. (C) 1999 Wiley-Liss, Inc.

Corporate Source: Natl Inst Sericultural & Entomol Sci Ibaraki Osaka

Japan 3058634 AP

Corporate Source: Univ Tokyo Tokyo Japan 113 AC

Subjects: JUVENILE-HORMONE

Subjects: TOBACCO HORNWORM

Subjects: MANDUCA-SEXTA

Subjects: TENEBRIO-MOLITOR

Subjects: GENE-EXPRESSION

Subjects: MESSENGER-RNAS

Subjects: CDNA CLONING
Subjects: B1 ISOFORM
Subjects: DROSOPHILA
Subjects: EPIDERMIS
Source: ARCHIVES OF INSECT BIOCHEMISTRY AND PHYSIOLOGY v.41
is.2 JUN pp.79-88

Language: EN English
Author: Hankey, GJ
**Title: Stroke - How large a public health problem, and how
can the neurologist help?**

Journal/Book Title: ARCHIVES OF NEUROLOGY

Year: 1999

Type: ARTICLE

Abstract: Stroke is an enormous public health problem, the magnitude of which can be reduced mainly by effective stroke prevention and less so by effective treatment of acute stroke. The greatest effect is likely to be achieved by a mass approach to prevention, which consists of modification of lifestyle behaviors (eg, less smoking and less intake of salt, alcohol, and fat) among the general population through public education and, more importantly, government legislation. The appropriate identification and treatment of high-risk individuals by neurologists is likely to have a smaller but complimentary impact on the population burden of stroke and a substantial impact on the burden of stroke: among individuals; The most cost-effective interventions for patients with transient ischemic attack and ischemic stroke are organized multidisciplinary acute care and rehabilitation in a stroke unit and early secondary prevention with aspirin, blood pressure control, smoking cessation, and, in the appropriate patient, oral anticoagulant therapy and carotid endarterectomy. The cost-effectiveness of carotid endarterectomy for asymptomatic carotid stenosis is highly questionable until data from ongoing trials (eg, Asymptomatic Carotid Surgery Trial) become available. Screening for asymptomatic carotid stenosis is more likely to be harmful than helpful, except perhaps among populations with a very high prevalence (pretest probability) of severe carotid stenosis. It is essential that the impact of these strategies on the incidence, outcome, and cost of stroke is measured and monitored. Currently, this is done simply, but unreliably, by examining changes in statistics that are already being measured, such as mortality (eg, among those younger than 70 years old, for greater accuracy). A growing priority in many countries is the development and implementation of valid, reliable, practical, and inexpensive methods of routinely collecting and evaluating data on stroke incidence, outcome, and cost.

Corporate Source: Royal Perth Hosp Perth WA Australia 6001 AP

Subjects: ASYMPTOMATIC CAROTID STENOSIS

Subjects: GLOBAL BURDEN

Subjects: MORTALITY

Subjects: DISEASE

Subjects: NETHERLANDS

Subjects: DISABILITY

Subjects: TRIALS

Subjects: COST

Subjects: RISK

Source: ARCHIVES OF NEUROLOGY v.56 is.6 JUN pp.748-754

Language: EN English
Author: Higgins, A
Author: London, J
Author: Charland, S
Author: Ratzer, E
Author: Clark, J
Author: Haun, W
Author: Maher, DP
**Title: Prophylactic antibiotics for elective laparoscopic
cholecystectomy - Are they necessary?**

Journal/Book Title: ARCHIVES OF SURGERY

Year: 1999

Type: ARTICLE

Abstract: Hypothesis: Prophylactic antibiotic treatment in elective laparoscopic cholecystectomy does not lower the already low infection rate associated with this procedure.
Abstract: Design and Setting: Prospective double-blind randomized trial at a community-based training hospital.
Abstract: Patients: Four hundred fifty patients undergoing elective laparoscopic cholecystectomy were randomized into 1 of 3 treatment arms: (1) preoperative cefotetan

disodium, 1 g intravenously; (2) preoperative cefazolin, 1 g intravenously; and (3) intravenous placebo. There were no demographic differences between groups in age, smoking history, American Society of Anesthesiologists score, infection risk class, time of antibiotic administration prior to surgery, and type of skin preparation. Abstract: Interventions: Laparoscopic cholecystectomy was attempted in all cases; however, 10 patients required conversion to an open cholecystectomy and they were included in the statistical analysis. Preoperatively, till patients were randomized in a blinded manner and received cefotetan, cefazolin, or placebo intravenously. Abstract: Results: There were 10 postoperative infections. In the cefotetan group, there were 3 cases of superficial surgical site infections. In the cefazolin group, there were 2 superficial surgical site infections-1 pneumonia and 1 rhinosinusitis. In the placebo group, there were 2 superficial surgical site infections and 1 urinary tract infection. The overall infection rate in this series was 2.4%. Follow-up was performed at routine postoperative visits and by telephone contact. Data were evaluated using the chi(2) test and analysis of Variance with Duncan post hoc test ($P < .05$). Abstract: Conclusion: Based on our data, use of prophylactic antibiotics does not decrease the rate of wound infections in elective laparoscopic cholecystectomy.

Corporate Source: Kaiser Permanente Denver CO USA 80205 AP

Corporate Source: Exempla St Joseph Hosp Denver CO USA 80218 AP

Corporate Source: Roche Pharmaceut Denver CO USA

Subjects: BILIARY SURGERY

Subjects: INFECTION

Subjects: RISK

Source: ARCHIVES OF SURGERY v.134 is.6 JUN pp.611-613

Language: EN English

Author: Borzotta, AP

Author: Beardsley, K

Title: Candida infections in critically ill trauma patients -

A retrospective case-control study

Journal/Book Title: ARCHIVES OF SURGERY

Year: 1999

Type: ARTICLE

Abstract: Hypothesis: We sought to determine whether the usual risk factors for fungal infections are applied to trauma patients. Abstract: Design: Case-control study. Abstract: Setting: American College of Surgeons Committee on Trauma-certified Level I trauma center in a tertiary care community hospital. Abstract: Patients: Screening of medical records of a consecutive sample of 459 patients aged 16 years or older admitted to an intensive care unit for 4 days or more from 1993 through 1996 identified 20 patients infected with *Candida* species. Two case controls for each were selected from the remaining patients using sex, age within 5 years, mechanism of injury, and best fit of first 4 Abbreviated Injury Scale scores; the Injury Severity Score and intensive care unit length of stay were also used if needed. Abstract: Interventions: None. Abstract: Results: Univariate analyses by t and χ^2 tests showed significance ($P < .05$) for number of units of blood transfused in the first 24 hours after injury, gastrointestinal perforation, hemodialysis, and total parenteral nutrition. Steroids, fungal colonization, use of central venous catheters, Acute Physiology and Chronic Health Evaluation II score, mechanical ventilation for 3 days or more, and the number and duration of antibiotics were not significantly different. Logistic regression analysis showed that only total parenteral nutrition was an independent risk factor in this trauma population. Abstract: Conclusion: Many of the classic risk factors for fungal infection in other populations are actually concomitants of injury severity and its requisite level of care in trauma patients. Hyperalimentation in persistently critically ill trauma patients significantly increases the risk of *Candida* infection.

Corporate Source: Legacy Emanuel Hosp Portland OR USA

Subjects: TOTAL PARENTERAL-NUTRITION

Subjects: HOSPITAL-ACQUIRED CANDIDEMIA

Subjects: CENTRAL VENOUS CATHETERS

Subjects: INTENSIVE-CARE UNIT

Subjects: SURGICAL PATIENTS

Subjects: RISK-FACTORS

Subjects: FUNGAL-INFECTIONS

Subjects: HOST DEFENSE

Subjects: EPIDEMIOLOGY

Subjects: FUNGEMIA

Source: ARCHIVES OF SURGERY v.134 is.6 JUN pp.657-664

Language: EN English

Author: Jaspars, EMJ

Title: Genome activation in alfamo- and ilarviruses

Journal/Book Title: ARCHIVES OF VIROLOGY

Year: 1999

Type: REVIEW

Abstract: Alfamo- and ilarviruses are characterized by the deficiency of their genomes (three messenger-sense RNAs) to start an infection cycle. The RNAs are in capsids built from a single species of protein of about 24 kD. A few dimers of this coat protein per RNA molecule are sufficient to activate the genome. Since the first description of genome activation [Bol JF, van Vloten-Doting L, Jaspars EMJ (1971) Virology 46: 73-85] three models have been proposed concerning its mechanism: the protection, the replicase and the messenger release hypotheses. The first two models make use of the fact that in these genera of RNA viruses the 3' termini of the RNAs bind the coat protein very strongly. The resulting structure would provide protection against 3'-to 5' exonucleases, or would permit correct initiation of minus-strand synthesis, respectively. However, naked inoculated RNAs of alfalfa mosaic virus appear to be quite stable in the cell, and in vitro the coat protein is inhibiting rather than stimulating initiation of minus-strand synthesis. The messenger release hypothesis states that the coat protein is needed for the release of viral messenger RNAs from membranous replication complexes throughout the whole viral replication cycle. This is supported by in vivo and in vitro observations, but as yet a detailed molecular mechanism is difficult to give.

Corporate Source: Leiden Univ Leiden Netherlands NL-2300 RA BC

Subjects: ALFALFA MOSAIC-VIRUS

Subjects: VIRAL COAT PROTEIN

Subjects: DEPENDENT RNA-POLYMERASE

Subjects: TOBACCO STREAK VIRUS

Subjects: CIS-ACTING SEQUENCES

Subjects: IN-VITRO

Subjects: BINDING-SITES

Subjects: 3'-UNTRANSLATED REGION

Subjects: STRAND RNA

Subjects: FUNCTIONAL EQUIVALENCE

Source: ARCHIVES OF VIROLOGY v.144 is.5 JUN pp.843-863

Language: EN English

Author: Zhang, Y

Author: Lartey, RT

Author: Hartson, SD

Author: Voss, TC

Author: Melcher, U

Title: Limitations to tobacco mosaic virus infection of turnip

Journal/Book Title: ARCHIVES OF VIROLOGY

Year: 1999

Type: ARTICLE

Abstract: Turnip vein-clearing virus (TVCV) and tobacco mosaic virus (TMV) represent subgroups of tobamoviruses infecting cruciferous and solanaceous plants, respectively. To identify adaptations that may have been necessary in the evolution of the TVCV subgroup from a TMV-like ancestor, the infection of turnip plants by TMV and by chimeras between TMV and TVCV was explored. TMV accumulated at spatially limited sites on inoculated turnip leaves as determined by leaf skeleton hybridization. A plasmid DNA containing a complete TVCV cDNA, when transcribed in vitro, produced RNA that was infectious to tobacco and turnip plants. TVCV-TMV chimeric genomes with junctions within coding regions were not infectious to tobacco, though the movement protein (MP) chimera was infectious to tobacco with a TMV MP transgene. Reciprocal chimeras with junctions between genes were infectious to tobacco. TVCV with a TMV MP gene infected turnips. The other tested chimeras were not detected in non-inoculated leaves, but were found in the inoculated leaves. Thus, the TMV MP is not responsible for the limitation of TMV spread in turnips.

Corporate Source: Oklahoma State Univ Stillwater OK USA 74078 AP

Subjects: CELL-TO-CELL

Subjects: GENE-MEDIATED RESISTANCE

Subjects: LONG-DISTANCE MOVEMENT

Subjects: HOST-RANGE DETERMINANT

Subjects: COAT PROTEIN

Subjects: ARABIDOPSIS-THALIANA

Subjects: NUCLEOTIDE-SEQUENCE

Subjects: REPLICASE GENES

Subjects: 30-KD PROTEIN

Subjects: TOBAMOVIRUS

Source: ARCHIVES OF VIROLOGY v.144 is.5 JUN pp.957-971

Language: EN English

Author: Porsch-Oezcueruemez, M

Author: Bilgin, Y

Author: Wollny, M
Author: Gediz, A
Author: Arat, A
Author: Karatay, E
Author: Akincl, A
Author: Sinterhauf, K
Author: Koch, H
Author: Siegfried, I
Author: von Georgi, R
Author: Brenner, G
Author: Kloer, HU

**Title: Prevalence of risk factors of coronary heart disease
in Turks living in Germany: The Giessen Study**

Journal/Book Title: ATHEROSCLEROSIS

Year: 1999

Type: ARTICLE

Abstract: Turkish people represent the majority of immigrants in Germany. Even though a high proportion of Turks has been living in Germany since about 20 years, little is known about risk factors of coronary heart disease (CHD) in this population. In this study a sample of 325 male and 155 female Turks are investigated, who voluntarily underwent a health check-up in Germany. Data about the presence of CHD, risk factors and blood parameters were collected. Mean residence time was 21 and 17 years (males/females). A low percentage of female participants was observed compared to the general Turkish population in Germany. Age adjusted prevalence of CHD reached 9.5% in males and 6.7% in females, respectively. Dyslipoproteinemia (DLP) showed the highest prevalence of all risk factors investigated in both genders. Total cholesterol (TC) levels were comparable to those of other western countries and remarkably higher than reported for the population in Turkey. Besides this, low high density lipoprotein-cholesterol (HDL-C) and apolipoprotein A-I (ApoA-I) levels could be found in the majority of the sample. The highest odds ratios for CHD were estimated for stress and hypertension in males and obesity in females. It is concluded that Turkish immigrants in Germany showed an assimilation of lipid pattern to western populations. However, reasons for low HDL-C levels remain unclear. Changes in the lipid metabolism chiefly seem to contribute to the risk factor pattern of Turkish immigrants in Germany. (C) 1999 Elsevier Science Ireland Ltd. All rights reserved.

Corporate Source: Univ Giessen Giessen Germany

Corporate Source: Turkish German Hlth Fdn Giessen Germany

Corporate Source: BRD Cologne Germany

Corporate Source: Univ Regensburg Regensburg Germany D-93053 BC

Corporate Source: Univ Giessen Giessen Germany

Subjects: DENSITY-LIPOPROTEIN CHOLESTEROL

Subjects: CARDIOVASCULAR-DISEASE

Subjects: LIPIDS

Subjects: MEN

Subjects: FIBRINOGEN

Subjects: MORTALITY

Subjects: APOLIPOPROTEINS

Subjects: PARTICIPANTS

Subjects: POPULATIONS

Subjects: SINGAPORE

Source: ATHEROSCLEROSIS v.144 is.1 MAY pp.185-198

Language: EN English

Author: Schulte, H

Author: Cullen, P

Author: Assmann, G

**Title: Obesity, mortality and cardiovascular disease in the
Munster Heart Study (PROCAM)**

Journal/Book Title: ATHEROSCLEROSIS

Year: 1999

Type: ARTICLE

Abstract: In the Munster Heart Study (PROCAM), 16 288 men aged 40.6 \pm 11.3 years (mean \pm S.D.) and 7328 women aged 36.0, 12.3 years were enrolled between 1979 and 1991. Mean body mass indices (BMIs) were 25.6 \pm 3.3 and 23.8 \pm 4.1 kg/m² in men and women, respectively. There was a graded and continuous positive interaction in both men and women between BMI, age and serum total cholesterol, low density lipoprotein (LDL) cholesterol, and blood pressure (both systolic and diastolic). High density lipoprotein (HDL) cholesterol tended to increase with age, but decreased in graded fashion with increases in BMI in both sexes. Triglyceride increased with BMI in both sexes and with

age in women, but decreased in the older age groups of overweight and obese men. Though fasting blood glucose increased with age and BMI in both, sexes, the increase was more marked in women. Among the 10 856 men aged 36-65 years at study entry, 313 deaths occurred within a follow-up period of 7.1 +/- 2.4 years. Among these men, increased mortality was seen at high BMIs in both smokers and non-smokers and was caused by coronary heart disease (CHD). Increased mortality at low BMI was seen in smokers but not in non-smokers and was due to an increase in cancer deaths. The BMI-associated increase in CHD death was completely accounted for by the factors contained in the Munster Heart Study (PROCAM) risk algorithm, indicating that the effect of overweight and obesity on CHD is mediated via other risk factors. (C) 1999 Elsevier Science Ireland Ltd. All rights reserved.

Corporate Source: Univ Munster Munster Germany D-48129 BC

Corporate Source: Univ Munster Munster Germany D-48129 BC

Subjects: BODY-MASS INDEX

Subjects: MIDDLE-AGED MEN

Subjects: RISK-FACTORS

Subjects: ABDOMINAL OBESITY

Subjects: VISCERAL OBESITY

Subjects: FAT DISTRIBUTION

Subjects: LIPID-LEVELS

Subjects: WEIGHT-GAIN

Subjects: WOMEN

Subjects: TRENDS

Source: ATHEROSCLEROSIS v.144 is.1 MAY pp.199-209

Language: EN English

Author: Breddin, HK

Author: Lippold, R

Author: Bittner, M

Author: Kirchmaier, CM

Author: Krzywanek, HJ

Author: Michaelis, J

Title: Spontaneous platelet aggregation as a predictive risk factor for vascular occlusions in healthy volunteers?

Results of the HAPARG Study

Journal/Book Title: ATHEROSCLEROSIS

Year: 1999

Type: ARTICLE

Abstract: The HAPARG Study (haemostatic parameters as risk factors in healthy volunteers) was performed in a subset of volunteers taking part in the MARISK Study (Mainzer Risikoindikatoren Studie für die koronare Herzkrankheit) sponsored by the German Ministry of Research and started in 1984. A previous study (Yamanishi et al., Thromb Haemostas 1985;54:539-543) had shown that spontaneously enhanced platelet aggregation as measured with the PAT-III-test and higher fibrinogen concentrations are significant risk factors for new vascular occlusions in diabetic patients. It was the aim of the HAPARG Study to establish whether spontaneous platelet aggregation and other hemostatic variables are independent risk factors for vascular occlusions in healthy volunteers. Employees of a chemical/pharmaceutical company aged 40-65 years and personnel of the University of Mainz, aged 30-60 years were included in this prospective study. Besides anamnestic data such as on smoking, hypertension and diabetes, blood pressure, the ankle/arm Doppler-index and an ECG were recorded and serum cholesterol, HDL, LDL, triglycerides, uric acid and glucose were measured. Men (1884) and women (989) entered the study and were followed for 4-6 years. In the age group of 30-50 years, more women than men were included. During the observation period 53 vascular occlusions occurred (36 coronary and nine cerebral events and eight peripheral vascular occlusions). Only three of these endpoints occurred in women. Besides age (odds ratio = 1.7, $P = 0.02$) and gender as expected risk factors, the multivariate logistic stepwise regression analysis revealed smoking (odds ratio = 2.2, $P = 0.008$), lower HDL-levels (odds ratio = 2.2, $P = 0.013$), elevated diastolic blood pressure (odds ratio = 1.4, $P = 0.004$) followed by spontaneous platelet aggregation (odds ratio = 1.1, $P = 0.037$), and slightly elevated blood glucose ($P = 0.0047$) as significant risk factors for men. Higher fibrinogen levels missed significance in this analysis ($P = 0.059$). None of the other hemostatic parameters showed a significant correlation with the vascular events. To our knowledge, this has been the first prospective trial in a large population of healthy individuals in which a platelet function parameter has been studied together with other possible risk factors. Spontaneously enhanced platelet aggregation is probably an independent risk factor and, like elevated fibrinogen and other haemostatic variables, an indicator of an ongoing active atherosclerotic process. (C) 1999 Elsevier Science Ireland Ltd. All rights reserved.

Corporate Source: Univ Frankfurt Frankfurt Germany D-60598 BC

Corporate Source: Univ Mainz Mainz Germany

Subjects: CORONARY HEART-DISEASE

Subjects: FACTOR-VII

Subjects: PLASMA-FIBRINOGEN

Subjects: MYOCARDIAL-INFARCTION

Subjects: HEMOSTATIC FACTORS
Subjects: ARTERIAL-DISEASE
Subjects: CARDIOVASCULAR-DISEASE
Subjects: ANTITHROMBIN-III
Subjects: ANGINA-PECTORIS
Subjects: MEN BORN
Source: ATHEROSCLEROSIS v.144 is.1 MAY pp.211-219

Language: EN English

Author: Poulter, NR

Title: Medical education - communicating best practice

Journal/Book Title: ATHEROSCLEROSIS, 1

Year: 1999

Type: ARTICLE

Abstract: There is unequivocal evidence that reduction of modifiable risk factors for coronary heart disease (CHD), such as elevated serum cholesterol, high blood pressure and smoking, decreases cardiovascular mortality. However, levels of intervention appear to be poor and there is often little evidence of a combined multiple risk factor approach to intervention, which is likely to be the optimal way to lower a patients overall risk of developing CHD. Attention has recently focused on bridging the gap between knowledge in the field of preventive cardiology and its application in everyday clinical practice. This can only be accomplished by the development of uncomplicated, practical guidelines that are evidenced-based and that provide specific targets for risk factors and indications for drug therapy. (C) 1999 Elsevier Science Ireland Ltd. All rights reserved.

Corporate Source: Imperial Coll Sch Med London England W2 1PG AC

Subjects: CORONARY-HEART-DISEASE

Subjects: JOINT TASK-FORCE

Subjects: CLINICAL-PRACTICE

Subjects: RISK-FACTORS

Subjects: BLOOD-PRESSURE

Subjects: PREVENTION

Subjects: CHOLESTEROL

Subjects: HEALTH

Subjects: TRIALS

Subjects: RECOMMENDATIONS

Source: ATHEROSCLEROSIS v.143 is.1 MAY pp.S13-S16

Language: EN English

Author: Kastelein, JJP

Title: The future of best practice

Journal/Book Title: ATHEROSCLEROSIS, 1

Year: 1999

Type: ARTICLE

Abstract: Evidence from epidemiological and clinical studies continues to improve our understanding of the pathogenesis of coronary heart disease (CHD). However, despite major advances in the development of diagnostic methods and effective treatment, CHD remains the leading cause of mortality in the Western world. That cholesterol lowering is of major importance in lowering the risk of developing coronary artery disease (CAD) is now an accepted principle in medicine. Most patients with CAD will require drug therapy to achieve target lipid levels. Subgroup analyses of data from the landmark statin trials show that this benefit is seen in all patient groups: male and female, older and younger patients, diabetics and non-diabetics, and patients with and without myocardial revascularization. Recent evidence suggests that the extent to which cholesterol is lowered is also important and that the attainment of reduced low-density lipoprotein cholesterol levels is associated with greater reductions in the risk of cardiovascular events. Unfortunately, data from studies to date do not provide a definitive answer to the question of whether there is a benefit in lowering cholesterol to very low levels. (C) 1999 Elsevier Science Ireland Ltd. All rights reserved.

Corporate Source: Univ Amsterdam Amsterdam Netherlands NL-1105 AZ BC

Subjects: CORONARY HEART-DISEASE

Subjects: SCANDINAVIAN SIMVASTATIN SURVIVAL

Subjects: ACUTE MYOCARDIAL-INFARCTION

Subjects: AVERAGE CHOLESTEROL LEVELS

Subjects: SERUM-CHOLESTEROL

Subjects: RISK-FACTORS

Subjects: HYPERCHOLESTEROLEMIA

Subjects: ATORVASTATIN

Subjects: PRAVASTATIN

Subjects: EFFICACY
Source: ATHEROSCLEROSIS v.143 is.1 MAY pp.S17-S21

Language: EN English
Author: Lugton, IW

Title: A cross-sectional study of risk factors affecting the outcome of rabbit haemorrhagic disease virus releases in New South Wales

Journal/Book Title: AUSTRALIAN VETERINARY JOURNAL

Year: 1999

Type: ARTICLE

Abstract: Objective To determine what factors governed the extent of outbreaks of rabbit haemorrhagic disease (RHD) following releases in New South Wales. Abstract: Design Retrospective cross-sectional study.

Abstract: Procedure Information from the data set of official releases was subjected to two preliminary analyses. More comprehensive information on a subsample of official RHD releases, sites and animals was gathered by telephone survey of Rural Lands Protection Board staff and farmers. Data were analysed using multivariate techniques to determine which factors were associated with rabbit mortality within one month of RHDV release, within several months of release and in affecting the proportion of the population killed.

Abstract: Results A strong association was found between the presence of heavy flea infestation (odds ratio 2.7), breeding in rabbits and outbreaks of RHD. For each week following breeding there was an 8% decline in the odds of an outbreak: Low temperatures also promoted outbreaks. Less important effects included the prior presence of RHD at the release site, which reduced the likelihood and severity of outbreaks. The presence of cattle and proximity to the nearest water body were associated with increased severity and likelihood of outbreaks respectively.

Abstract: Conclusion Both breeding of rabbits and associated high flea numbers may act together or independently in promoting outbreaks of RHD. Stresses involved with rabbit reproduction and low environmental temperatures also appear to influence the likelihood of outbreaks. The effects of proximity to cattle and water suggests that both flies and mosquitoes may have a minor role in local transmission.

Corporate Source: NSW Agr Orange NSW Australia 2800 AP

Subjects: HEMORRHAGIC-DISEASE

Subjects: SPAIN

Source: AUSTRALIAN VETERINARY JOURNAL v.77 is.5 MAY
pp.322-328

Language: EN English
Author: Bernal, MC
Author: Vicens, P
Author: Carrasco, MC
Author: Redolat, R

Title: Effects of nicotine on spatial learning in C57BL mice

Journal/Book Title: BEHAVIOURAL PHARMACOLOGY

Year: 1999

Type: ARTICLE

Abstract: In the present study, the effects of nicotine on spatial memory in C57BL/6J mice was evaluated. Mice were trained in a water maze during four daily sessions of three trials each. In the first experiment, nicotine (0.7 and 0.35 mg/kg) or saline was administered once daily for 4 days, 15 min before the start of daily training; an impairment of performance of the water maze was observed in the group treated with 0.7 mg/kg of nicotine. In the second experiment, nicotine (0.7 and 0.35 mg/kg) or saline was administered from the 5 days prior to the beginning of the task and during the 4 days of acquisition. The results indicated an improvement in the rate of learning in the 9-day nicotine treated groups. The comparison between 4-day and 9-day treated groups revealed that the group receiving 0.35 mg/kg of nicotine for 9 days displayed significantly shorter latencies than all the other groups, while the group receiving 0.7 mg/kg of nicotine for 4 days performed significantly worse than all the other groups. The most noteworthy result is that nicotine was more effective after a more prolonged administration than when administered only during the training days. (C) 1999 Lippincott Williams & Wilkins.

Corporate Source: Univ Valencia Valencia Spain 46010 AC

Subjects: CHOLINERGIC PROJECTION SYSTEM

Subjects: AGED RATS

Subjects: LESIONS

Subjects: MEMORY

Subjects: STIMULATION

Subjects: ACQUISITION

Subjects: INFUSION

Subjects: BRAIN

Language: EN English

Author: Chong, CK

Author: Shin, HJ

Author: Chang, SI

Author: Choi, JD

Title: Role of tryptophanyl residues in tobacco acetolactate synthase

Journal/Book Title: BIOCHEMICAL AND BIOPHYSICAL RESEARCH COMMUNICATIONS

Year: 1999

Type: ARTICLE

Abstract: Acetolactate synthase (ALS) catalyzes the first common step in the biosynthesis of valine, leucine, and isoleucine. ALS is the target of three classes of herbicides, the sulfonylureas, the imidazolinones, and the triazolopyrimidines. Five mutants (W266F, W439F, W490F, W503F, and W573F) of the ALS gene from *Nicotiana tabacum* were constructed and expressed in *Escherichia coli*, and the enzymes were purified. The W490F mutation abolished the binding affinity for cofactor FAD and inactivated the enzyme. The replacement of Trp573 by Phe yielded a mutant ALS resistant to the three classes of herbicides. The other three mutations, W266F, W439F, and W503F, did not significantly affect the enzymatic properties and the sensitivity to the herbicides. These results indicate that the Trp490 residue is essential for the binding of FAD and that Trp573 is located at the herbicide binding site. The data also suggest that the three classes of herbicides bind ALS competitively. (C) 1999 Academic Press.

Corporate Source: Chungbuk Natl Univ Cheongju South Korea 361763 AC

Subjects: ACETOHYDROXY ACID SYNTHASE

Subjects: ESCHERICHIA-COLI

Subjects: HERBICIDE RESISTANCE

Subjects: SALMONELLA-TYPHIMURIUM

Subjects: FUNCTIONAL EXPRESSION

Subjects: ARABIDOPSIS-THALIANA

Subjects: SULFOMETURON METHYL

Subjects: PURIFICATION

Subjects: INHIBITORS

Subjects: GENE

Source: BIOCHEMICAL AND BIOPHYSICAL RESEARCH COMMUNICATIONS

v.259 is.1 MAY 27 pp.136-140

Language: EN English

Author: Li, DU

Author: Saldeen, T

Author: Mehta, JL

Title: gamma-Tocopherol decreases ox-LDL-mediated activation of nuclear factor-kappa B and apoptosis in human coronary artery endothelial cells

Journal/Book Title: BIOCHEMICAL AND BIOPHYSICAL RESEARCH COMMUNICATIONS

Year: 1999

Type: ARTICLE

Abstract: gamma-Tocopherol, produced by many plants, is the major form of tocopherol in the United States diet. It is an efficient protector of lipids against peroxidative damage. Epidemiologic studies show that supplementation of diet with gamma-tocopherol is inversely related to the risk of death from cardiovascular disease. This study was conducted to examine the role of gamma-tocopherol in oxidized LDL (ox-LDL)-induced nuclear factor (NF)-kappa B activation and apoptosis in human coronary artery endothelial cells (HCAECs). Cultured HCAECs were treated with ox-LDL (10-40 mu g/ml). Incubation of HCAECs with ox-LDL resulted in apoptosis of HCAECs, as determined by TUNEL and DNA laddering. Ox-LDL degraded I kappa B protein and activated NF-kappa B in HCAECs (both $P < 0.01$ vs control), as determined by Western blot. Treatment of cells with gamma-tocopherol attenuated ox-LDL-mediated degradation of I kappa B and activation of NF-kappa B (both $P < 0.01$ vs ox-LDL alone). The presence of gamma-tocopherol also reduced ox-LDL-induced apoptosis ($P < 0.01$ vs ox-LDL alone). A high concentration of gamma-tocopherol (50 mu mol/L) was more effective than the low concentration of gamma-tocopherol (10 mu mol/L) in this process. These observations show that ox-LDL induces apoptosis of HCAECs at least partially by activation of NF-kappa B signal transduction pathway. gamma-Tocopherol significantly decreases ox-LDL-induced apoptosis of HCAECs by inhibiting the activation of NF-kappa B. (C) 1999 Academic Press.

Corporate Source: Univ Florida Gainesville FL USA 32610 AP

Corporate Source: Univ Florida Gainesville FL USA 32610 AP

Corporate Source: Vet Affairs Med Ctr Gainesville FL USA 32608 AP

Corporate Source: Uppsala Univ Uppsala Sweden

Subjects: LOW-DENSITY-LIPOPROTEIN

Subjects: ISCHEMIC-HEART-DISEASE

Subjects: SMOOTH-MUSCLE CELLS

Subjects: ALPHA-TOCOPHEROL

Subjects: VITAMIN-E

Subjects: ATHEROSCLEROTIC LESION

Subjects: ANTIOXIDANT VITAMINS

Subjects: DOWN-REGULATION

Subjects: DEATH

Subjects: EXPRESSION

Source: BIOCHEMICAL AND BIOPHYSICAL RESEARCH COMMUNICATIONS

v.259 is.1 MAY 27 pp.157-161

Language: EN English

Author: Dunaeva, M

Author: Goerschen, E

Title: RIP-JIP60 alters conformation of ribosomes in vivo

Journal/Book Title: BIOCHEMICAL AND BIOPHYSICAL RESEARCH COMMUNICATIONS

Year: 1999

Type: ARTICLE

Abstract: Recently it has been demonstrated that expression putative ribosome-inactivating protein JIP 60 in transgenic tobacco plants leads to the depurination of large rRNA and inactivation of plant ribosomes. Treatment of ribosomes from transgenic tobacco plants with low concentration of alpha-sarcin resulted in the appearance of an rRNA specific fragment. No fragment was observed under the same conditions for ribosomes from wild type plants. The alteration of the conformation of ribosomes in transgenic tobacco due to the expression of JIP60 is assumed. (C) 1999 Academic Press.

Corporate Source: Inst Pflanzenbiochem Halle Germany D-06120 BC

Subjects: ALPHA-SARCIN

Subjects: INACTIVATING PROTEINS

Subjects: EUKARYOTIC RIBOSOMES

Subjects: PLANTS

Subjects: SITE

Subjects: RNA

Subjects: RECOGNITION

Subjects: RICIN

Source: BIOCHEMICAL AND BIOPHYSICAL RESEARCH COMMUNICATIONS

v.258 is.3 MAY 19 pp.572-573

Language: EN English

Author: Namgoong, SK

Author: Lee, HJ

Author: Kim, YS

Author: Shin, JH

Author: Che, JK

Author: Jang, DY

Author: Kim, GS

Author: Yoo, JW

Author: Kang, MK

Author: Kil, MW

Author: Choi, JD

Author: Chang, SI

Title: Synthesis of the quinoline-linked triazolopyrimidine analogues and their interactions with the recombinant tobacco acetolactate synthase

Journal/Book Title: BIOCHEMICAL AND BIOPHYSICAL RESEARCH COMMUNICATIONS

Year: 1999

Type: ARTICLE

Abstract: Acetolactate synthase (ALS) is the first common enzyme in the biosynthesis of L-leucine, L-isoleucine, and L-valine. Triazolopyrimidine sulfonamide (TP) is a mixed-type inhibitor of ALS with respect to both pyruvate and

thiamine pyrophosphate. In this study, we synthesized new substituted quinoline-linked TP analogues and several TP analogues which contained either unsubstituted aminoquinolines or amino isoquinolines. In addition, we examined the interactions of both the wild-type and the sulfonylurea-resistant recombinant tobacco ALS enzymes in a highly pure and active form with the quinoline-linked TP analogues, respectively. The wild-type tobacco ALS was extremely sensitive to inhibition by the quinoline-linked TP analogues. In contrast, the mutant tobacco ALS was insensitive to both the quinoline-linked triazolopyrimidine and the sulfonylurea herbicides. The results indicate that the ability of the quinoline-linked TP analogues to inhibit ALS is highly sensitive to substitution at the ortho position (C-7) and to the position of the ring nitrogen around the sulfonamide functionality(C-8). (C) 1999 Academic Press.

Corporate Source: Chungbuk Natl Univ Cheongju South Korea 361763 AC

Corporate Source: Seoul Womens Univ Seoul South Korea 139774 AC

Corporate Source: Seoul Natl Univ Seoul South Korea 151742 AC

Subjects: SULFONYLUREA HERBICIDE RESISTANCE

Subjects: ACETOHYDROXYACID SYNTHASE

Subjects: ESCHERICHIA-COLI

Subjects: WILD-TYPE

Subjects: PURIFICATION

Subjects: INHIBITORS

Subjects: SITE

Subjects: EXPRESSION

Subjects: MECHANISM

Subjects: PLANTS

Source: BIOCHEMICAL AND BIOPHYSICAL RESEARCH COMMUNICATIONS

v.258 is.3 MAY 19 pp.797-801

Language: EN English

Author: Brude, IR

Author: Drevon, CA

Author: Viken, K

Author: Arnstad, JE

Author: Valnes, KN

Author: Nenseter, MS

Title: Doxazosin treatment and peroxidation of low-density lipoprotein among male hypertensive subjects: In vitro and ex vivo studies

Journal/Book Title: BIOCHEMICAL PHARMACOLOGY

Year: 1999

Type: ARTICLE

Abstract: Doxazosin is an antihypertensive drug that gives rise to 6- and 7-hydroxydoxazosin during hepatic metabolism. The structures of the hydroxymetabolites suggest that they may possess antioxidative properties. The aim of the present study was to examine whether doxazosin and 6- and 7-hydroxydoxazosin were able to scavenge free radicals and whether these compounds might protect low-density lipoprotein (LDL) against in vitro and ex vivo oxidation. Both 6- and 7-hydroxydoxazosin showed radical scavenging capacity as assessed by measuring scavenging of 1,1-diphenyl-2-picrylhydrazyl radicals. In vitro incubation with 10 μ M 6- and 7-hydroxydoxazosin significantly reduced human mononuclear cell-mediated oxidation of LDL, measured as the formation of lipid peroxides and the relative electrophoretic mobility of LDL (to 10 and 6% of the control, respectively). Furthermore, formation of conjugated dienes in LDL during Cu^{2+} -induced oxidation was significantly reduced in the presence of 5 μ M 6- and 7-hydroxydoxazosin (to 28% of t(max) [time to maximum] of control). However, treatment of hypertensive patients with increasing doses of doxazosin (from 1 to 8 mg/day) for 8 weeks altered neither Cu^{2+} -catalyzed, 2,2'-azobis-(2-amidinopropane hydrochloride)-initiated, nor cell-mediated oxidation of patient LDL ex vivo. Furthermore, the total antioxidative capacity of plasma was unaffected by treatment. In conclusion, the present study shows that 6- and 7-hydroxydoxazosin have radical scavenging properties and protect LDL against in vitro oxidation. However, treatment of hypertensive male subjects with increasing doses of doxazosin for 8 weeks did not affect ex vivo oxidation of LDL. BIOCHEM PHARMACOL 58;1:183-191, 1999. (C) 1999 Elsevier Science Inc.

Corporate Source: Univ Oslo Oslo Norway N-0316 BC

Subjects: OXIDATIVE MODIFICATION

Subjects: HUMAN PLASMA

Subjects: ANTIOXIDANTS

Subjects: ASCORBATE

Subjects: LDL

Subjects: CHOLESTEROL

Subjects: MONOCYTE

Subjects: SMOKERS

Subjects: INHIBIT

Subjects: LIPIDS

Source: BIOCHEMICAL PHARMACOLOGY v.58 is.1 JUL 1 pp.183-191

Language: EN English

Author: Weaver, JC

Author: Vaughan, TE

Author: Martin, GT

Title: Biological effects due to weak electric and magnetic fields: The temperature variation threshold

Journal/Book Title: BIOPHYSICAL JOURNAL

Year: 1999

Type: ARTICLE

Abstract: A large number of epidemiological and experimental studies suggest that prolonged (>100 s) weak 50-60-Hz electric and magnetic field (EMF) exposures may cause biological effects (NIEHS Working Group, NIH, 1998; Bersani, 1999). We show, however, that for typical temperature sensitivities of biochemical processes, realistic temperature variations during long exposures raise the threshold exposure by two to three orders of magnitude over a fundamental value, independent of the biophysical coupling mechanism. Temperature variations have been omitted in previous theoretical analyses of possible weak field effects, particularly stochastic resonance (Bezrukov and Vodyanoy 1997a. *Nature*. 385:319-321; Astumian et al., 1997 *Nature*. 338:632-633; Bezrukov and Vodyanoy, 1997b. *Nature*. 338:663; Dykman and McClintock, 1998. *Nature*. 391:344; McClintock, 1998; Gammaitoni et al., 1998. *Rev. Mod. Phys.* 70:223-287). Although sensory systems usually respond to much shorter (similar to 1 s) exposures and can approach fundamental limits (Bialek, 1987 *Annu. Rev. Biophys. Biophys. Chem.* 16:455-468; Adair et al., 1998. *Chaos*. 8:576-587), our results significantly decrease the plausibility of effects for nonsensory biological systems due to prolonged, weak-field exposures.

Corporate Source: Harvard Univ Cambridge MA USA 02139 AP

Subjects: STOCHASTIC RESONANCE

Subjects: FREQUENCY-DEPENDENCE

Subjects: CELLS

Subjects: RECTIFICATION

Subjects: STIMULATION

Subjects: LIMITS

Subjects: SKIN

Subjects: CORE

Source: BIOPHYSICAL JOURNAL v.76 is.6 JUN pp.3026-3030

Language: EN English

Author: Nakashita, H

Author: Arai, Y

Author: Yoshioka, K

Author: Fukui, T

Author: Doi, Y

Author: Usami, R

Author: Horikoshi, K

Author: Yamaguchi, I

Title: Production of biodegradable polyester by a transgenic tobacco

Journal/Book Title: BIOSCIENCE BIOTECHNOLOGY AND BIOCHEMISTRY

Year: 1999

Type: ARTICLE

Abstract: The acetoacetyl-CoA reductase gene (phbB) of *Ralstonia eutropha* and the poly[(R)-(-)-3-hydroxyalkanoate] synthase gene (phaC(AC)) of *Aeromonas caviae* were introduced into tobacco plant by *Agrobacterium* mediated transformation method. The resulting transgenic tobacco expressed both introduced genes and the expression of these genes was confirmed by enzymatic analysis and western blotting. GC-MS analysis of the chloroform extract of tobacco leaves indicated that the transgenic plant produced biodegradable polyester, poly-[(R)-(-)-3-hydroxybutyrate]. GPC analysis indicated that the number-average molecular weights ($\langle M_n \rangle$) and polydispersity ($\langle M_w \rangle / \langle M_n \rangle$) were 32,000 and 1.90, respectively.

Corporate Source: Inst Phys & Chem Res Wako Saitama Japan 3510198 AP

Corporate Source: Toyo Univ Kawagoe Saitama Japan 3508585 AP

Subjects: AEROMONAS-CAVIAE

Subjects: BIOSYNTHESIS

Subjects: PLANTS

Subjects: POLYHYDROXYBUTYRATE
Subjects: EXPRESSION
Subjects: PATHWAY
Subjects: GENES
Subjects: CELLS
Source: BIOSCIENCE BIOTECHNOLOGY AND BIOCHEMISTRY v.63 is.5
MAY pp.870-874

Language: EN English
Author: Carlsson, LE
Author: Santoso, S
Author: Spitzer, C
Author: Kessler, C
Author: Greinacher, A

Title: The alpha(2) gene coding sequence T-807/A(873) of the platelet collagen receptor integrin alpha(2)beta(1) might be a genetic risk factor for the development of stroke in younger patients

Journal/Book Title: BLOOD
Year: 1999
Type: ARTICLE

Abstract: The polymorphisms C807T and G(873)A Of the platelet integrin alpha(2)beta(1) (collagen receptor glycoprotein [GP] Ia-IIa) are linked to the expression density of this receptor. The GPIa T-807/A(873) allele causes a higher receptor expression, enhancing platelet binding to collagen. This might present a genetic predisposition for the development of thromboembolic complications. In this case-control study, the genotypes of the GPIa C807T polymorphism and presence of conventional risk factors (hypertension, diabetes mellitus, and smoking) were compared in stroke patients and patients without cerebrovascular disease (non CVD patients) less than or equal to 50 years of age (n = 45 and 41, respectively) and in stroke patients and non-CVD patients more than 50 years of age (n = 182 and 129, respectively). In patients less than or equal to 50 years of age, the T-807 allele was the only overrepresented variable (P = .023; odds ratio, 3.02; 95% confidence interval, 1.20 to 7.61) and an independent risk factor, whereas the presence of conventional risk factors was similar between stroke patients less than or equal to 50 years of age and non CVD patients less than or equal to 50 years of age. Large epidemiological studies should prove whether the platelet collagen receptor GPIa-IIa T-807 allele is an independent risk factor for the development of stroke in younger patients. (C) 1999 by The American Society of Hematology.

Corporate Source: Univ Greifswald Greifswald Germany D-17487 BC
Corporate Source: Univ Greifswald Greifswald Germany D-17487 BC
Corporate Source: Univ Giessen Giessen Germany D-6300 BC

Subjects: GLYCOPROTEIN-IA
Subjects: POLYMORPHISMS
Subjects: AGGREGATION
Subjects: DEFICIENCY
Subjects: MORTALITY
Subjects: DISORDER
Subjects: DENSITY
Subjects: CELLS

Source: BLOOD v.93 is.11 JUN 1 pp.3583-3586

Language: EN English
Author: Bilgrami, S
Author: Feingold, JM
Author: Dorsky, D
Author: Edwards, RL
Author: Bona, RD
Author: Khan, AM
Author: Rodriguez-Pinero, F
Author: Clive, J
Author: Tutschka, PJ

Title: Incidence and outcome of Clostridium difficile infection following autologous peripheral blood stem cell transplantation

Journal/Book Title: BONE MARROW TRANSPLANTATION

Year: 1999
Type: ARTICLE

Abstract: A retrospective evaluation of 200 consecutive recipients of autologous peripheral blood stem cell transplantation (PBSCT) was conducted to ascertain the incidence and outcome of infection with *Clostridium difficile*. The diagnosis was confirmed in 14 patients with diarrhea (15 episodes) at a median of 33 days after stem cell infusion. Five patients were neutropenic at the time of diagnosis. Every individual had adverse known risk factors such as recent or current use of antibiotic, corticosteroid and antiviral therapy, recent administration of myeloablative chemotherapy and numerous, prolonged periods of hospitalization. Diarrhea, frequently hemorrhagic, was the most common presenting feature along with fever, abdominal cramps and abdominal distention. Diagnosis was established by the stool-cytotoxin test. Response to standard treatment with oral vancomycin or metronidazole was prompt despite the presence of several adverse prognostic features in these patients. There was only one instance of relapse which was also treated successfully. Several transplant-related variables such as age, sex, underlying malignancy, myelo-ablative regimen, duration of neutropenia, and prophylactic use of oral ampicillin underwent statistical analysis but failed to be predictive of *C. difficile* infection in such a setting. Finally, *C. difficile* is not uncommon after autologous PBSCT and must be included in the differential diagnosis in any such patient with diarrhea.

Corporate Source: Univ Connecticut Farmington CT USA 06030 AP

Subjects: ANTIBIOTIC-ASSOCIATED COLITIS

Subjects: HOSPITAL ENVIRONMENT

Subjects: ONCOLOGY UNIT

Subjects: METRONIDAZOLE

Subjects: COLONIZATION

Subjects: DIARRHEA

Subjects: EPIDEMIOLOGY

Subjects: ACQUISITION

Subjects: VANCOMYCIN

Source: BONE MARROW TRANSPLANTATION v.23 is.10 MAY
pp.1039-1042

Language: EN English

Author: Chiodini, FC

Author: Tassonyi, E

Author: Hulo, S

Author: Bertrand, D

Author: Muller, D

**Title: Modulation of synaptic transmission by nicotine and
nicotinic antagonists in hippocampus**

Journal/Book Title: BRAIN RESEARCH BULLETIN

Year: 1999

Type: ARTICLE

Abstract: Using rat hippocampal slices, we studied the effects of nicotine and three antagonists of neuronal nicotinic receptors on excitatory and inhibitory transmission. We report that nicotine at concentrations between 0.5 and 100 μ M enhanced excitatory synaptic responses and increased the size of the presynaptic fiber volley. This effect was reproduced by three neuronal nicotinic receptor antagonists: dihydro-beta-erythroidine, methyllycaconitine and mecamylamine. In contrast, nicotine, but not nicotinic antagonists, produced a dual effect on inhibition: nicotine enhanced gamma-aminobutyric-acid A (GABA(A)) receptor-mediated synaptic responses at low concentration (0.5 μ M) and blocked them at high concentration (100 μ M). We conclude that the excitatory effects of nicotine are reproduced by nicotinic receptor antagonists, thereby suggesting that these effects might be mediated through receptor desensitization. These results also indicate that nicotine differentially affects GABAergic inhibition at low and high concentrations-effects that are not reproduced by antagonists. (C) 1999 Elsevier Science Inc.

Corporate Source: Ctr Med Univ Geneva Geneva Switzerland 4 AC

Corporate Source: Ctr Med Univ Geneva Geneva Switzerland CH-1211 BC

Subjects: ACETYLCHOLINE-RECEPTORS

Subjects: GABA RELEASE

Subjects: ALPHA-BUNGAROTOXIN

Subjects: RAT HIPPOCAMPUS

Subjects: D-TUBOCURARINE

Subjects: NEURONS

Subjects: NUCLEUS

Subjects: CALCIUM

Subjects: INHIBITION

Subjects: CURRENTS

Source: BRAIN RESEARCH BULLETIN v.48 is.6 APR pp.623-628

Language: EN English
Author: Chapman, S
Title: Scare tactics cut smoking rates in Australia to all time low

Journal/Book Title: BRITISH MEDICAL JOURNAL
Year: 1999
Type: NEWS ITEM
Source: BRITISH MEDICAL JOURNAL v.318 is.7197 JUN 5
pp.1508-1508

Language: EN English
Author: Lam, TH
Author: Ho, SY
Title: Emerging tobacco hazards in China - Is assumption of no association between smoking and other causes of death valid?

Journal/Book Title: BRITISH MEDICAL JOURNAL
Year: 1999
Type: LETTER
Corporate Source: Univ Hong Kong Hong Kong Peoples R China
Source: BRITISH MEDICAL JOURNAL v.318 is.7197 JUN 5
pp.1554-1555

Language: EN English
Author: Lhatoo, Y
Title: Emerging tobacco hazards in China - Double standards apply with importation of tobacco into developing countries

Journal/Book Title: BRITISH MEDICAL JOURNAL
Year: 1999
Type: LETTER
Corporate Source: Asia Televis Hong Kong Peoples R China
Subjects: MORTALITY
Source: BRITISH MEDICAL JOURNAL v.318 is.7197 JUN 5
pp.1555-1555

Language: EN English
Author: Peto, R
Author: Chen, ZM
Author: Boreham, J
Title: Emerging tobacco hazards in China - Reply

Journal/Book Title: BRITISH MEDICAL JOURNAL
Year: 1999
Type: LETTER
Corporate Source: Radcliffe Infirm Oxford England OX2 6HE AC
Subjects: MORTALITY
Source: BRITISH MEDICAL JOURNAL v.318 is.7197 JUN 5
pp.1555-1555

Language: EN English
Author: Johnstone, C
Title: I don't want to be invited to invest in the tobacco trade

Journal/Book Title: BRITISH MEDICAL JOURNAL
Year: 1999
Type: LETTER
Source: BRITISH MEDICAL JOURNAL v.318 is.7197 JUN 5
pp.1555-1555

Language: EN English

Author: Brown, P

Title: WHO agrees measures to stop global spread of tobacco use

Journal/Book Title: BRITISH MEDICAL JOURNAL

Year: 1999

Type: NEWS ITEM

Source: BRITISH MEDICAL JOURNAL v.318 is.7196 MAY 29
pp.1437-1437

Language: EN English

Author: Kovac, C

Title: Hungary passes non-smokers' rights bill

Journal/Book Title: BRITISH MEDICAL JOURNAL

Year: 1999

Type: NEWS ITEM

Source: BRITISH MEDICAL JOURNAL v.318 is.7196 MAY 29
pp.1438-1438

Language: EN English

Author: Irvine, L

Author: Crombie, IK

Author: Clark, RA

Author: Slane, PW

Author: Feyerabend, C

Author: Goodman, KE

Author: Cater, JI

Title: Advising parents of asthmatic children on passive smoking randomised controlled trial

Journal/Book Title: BRITISH MEDICAL JOURNAL

Year: 1999

Type: ARTICLE

Abstract: Objective. To investigate whether parents of asthmatic children would stop smoking or alter their smoking habits to protect their children from environmental tobacco smoke. **Abstract: Design.** Randomised controlled trial.

Abstract: Setting. Tayside and Fife, Scotland.

Abstract: Participants. 501 families with an asthmatic child aged 2-12 years living with a parent who smoked.

Abstract: Intervention. Parents were told about the impact of passive smoking on asthma and were advised to stop smoking or change their smoking habits to protect their child's health.

Abstract: Main outcome measures. Salivary cotinine concentrations in children, and changes in reported smoking habits of the parents 1 year after the intervention. **Abstract: Results.** At the second visit, about 1 year after the baseline visit, a small decrease in salivary cotinine concentrations was found in both groups of children: the mean decrease in the intervention group (0.70 ng/ml) was slightly smaller than that of the control group (0.88 ng/ml), but the net difference of 0.19 ng/ml had a wide 95% confidence interval (-0.86 to 0.48). Overall, 98% of parents in both groups still smoked at follow up. However, there was a non-significant tendency for parents in the intervention group to report smoking more at follow up and to having a reduced desire to stop smoking.

Abstract: Conclusions. A brief intervention to advise parents of asthmatic children about the risks from passive smoking was ineffective in reducing their children's exposure to environmental tobacco smoke. The intervention may have made some parents less inclined to stop smoking. If a clinician believes that a child's health is being affected by parental smoking, the parent's smoking needs to be addressed as a separate issue from the child's health.

Corporate Source: Univ Dundee Dundee Scotland DD1 9SY AC

Corporate Source: Univ Dundee Dundee Scotland DD1 9SY AC

Corporate Source: Univ Dundee Dundee Scotland DD1 9SY AC

Corporate Source: Wallacetown Hlth Ctr Dundee Scotland DD4 6RB AC

Corporate Source: Nicotine Lab London England SE14 5ER AC

Subjects: GENERAL-PRACTICE

Subjects: TOBACCO-SMOKE

Subjects: QUIT SMOKING

Subjects: INTERVENTION

Subjects: COTININE

Subjects: INFANCY

Subjects: ADVICE
Subjects: PRACTITIONER
Subjects: PREDICTORS
Subjects: CESSATION
Source: BRITISH MEDICAL JOURNAL v.318 is.7196 MAY 29
pp.1456-1459

Language: EN English
Author: Hurt, RD
Title: Treat tobacco dependence and "bend the trend"
Journal/Book Title: BULLETIN OF THE WORLD HEALTH ORGANIZATION
Year: 1999
Type: EDITORIAL MATERIAL
Corporate Source: Mayo Clin Rochester MN USA 55905 AP
Corporate Source: Mayo Clin Rochester MN USA
Source: BULLETIN OF THE WORLD HEALTH ORGANIZATION v.77 is.5
MAY pp.367-367

Language: EN English
Author: Milone, SD
Author: Newton, GE
Author: Parker, JD
Title: Hemodynamic and biochemical effects of 100% oxygen breathing in humans
Journal/Book Title: CANADIAN JOURNAL OF PHYSIOLOGY AND PHARMACOLOGY
Year: 1999
Type: ARTICLE

Abstract: High concentrations of inspired oxygen have been reported to have significant hemodynamic effects that may be related to increased free radical production. If oxygen therapy increases free radical production, it may also modify hemodynamic responses to a nitric oxide donor. Twenty-nine healthy male volunteers were studied using randomized, double-blind, placebo-controlled, crossover designs to determine whether oxygen therapy is associated with hemodynamic and forearm vascular effects. We measured hemodynamic parameters and forearm vascular responses before and 1 h after exposure to 100% oxygen versus medical air. Plasma 8-iso-PGF(2 alpha) and plasma vitamin C were measured to assess the biochemical effects of oxygen administration. Hemodynamic measurements were also made following the acute administration of sublingual nitroglycerin. Oxygen therapy caused no significant change in blood pressure, plasma 8-iso-PGF(2 alpha), or vitamin C. Oxygen did cause a significant reduction in heart rate and forearm blood flow, and an increase in peripheral vascular resistance. Oxygen caused no change in the hemodynamic response to nitroglycerin. Therefore, in healthy young adults, therapy with 100% oxygen does not affect blood pressure, despite causing an increase in vascular resistance, is not associated with evidence of increased free radical injury, and does not affect the hemodynamic responses to nitroglycerin.

Corporate Source: Univ Toronto Toronto ON Canada
Corporate Source: Mt Sinai Hosp Toronto ON Canada M5G 1X5 AP
Subjects: HUMAN-BLOOD-PLASMA
Subjects: LOW-DENSITY-LIPOPROTEIN
Subjects: VITAMIN-C STATUS
Subjects: STRESS IN-VIVO
Subjects: LIPID-PEROXIDATION
Subjects: CIGARETTE SMOKERS
Subjects: SUPPLEMENTAL OXYGEN
Subjects: SUPEROXIDE ANION
Subjects: OXIDATIVE DAMAGE
Subjects: CORONARY-ARTERY
Source: CANADIAN JOURNAL OF PHYSIOLOGY AND PHARMACOLOGY v.77
is.2 FEB pp.124-130

Language: EN English
Author: Reid, RD
Author: Pipe, A
Author: Dafoe, WA
Title: Is telephone counselling a useful addition to

**physician advice and nicotine replacement therapy in
helping patients to stop smoking? A randomized
controlled trial**

Journal/Book Title: CANADIAN MEDICAL ASSOCIATION JOURNAL

Year: 1999

Type: ARTICLE

Abstract: Background: The authors evaluated the incremental efficacy of telephone counselling by a nurse in addition to physician advice and nicotine replacement therapy in helping patients to stop smoking. **Abstract:** Methods: The trial was conducted at the University of Ottawa Heart Institute. A total of 396 volunteers who smoked 15 or more cigarettes daily were randomly assigned to either of 2 groups: usual care (control group) and usual care plus telephone counselling (intervention group); the groups were stratified by sex and degree of nicotine dependence. Usual care involved the receipt of physician advice on 3 occasions, self-help materials and 12 weeks of nicotine replacement therapy. Telephone counselling was provided by a nurse at 2, 6 and 13 weeks after the target quit date. Point-prevalent quit rates were determined at 52 weeks after the target quit date. **Abstract: Results:** The point-prevalent quit rates at 52 weeks did not differ significantly between the control and intervention groups (24.1% v. 23.4% respectively). The quit rates did not differ significantly at the secondary measurement points of 4, 12 and 26 weeks. **Abstract:** Interpretation: Brief physician assistance, along with nicotine replacement therapy, can help well-motivated smokers to quit. Three additional sessions of telephone counselling by a nurse were ineffective in increasing quit rates. This form of assistance may be useful in the absence of physician advice or when self-selected by patients.

Corporate Source: Univ Ottawa Ottawa ON Canada K1Y 4W7 AP

Corporate Source: Univ Ottawa Ottawa ON Canada K1Y 4W7 AP

Subjects: ACUTE MYOCARDIAL-INFARCTION

Subjects: TRANSDERMAL NICOTINE

Subjects: CESSATION

Subjects: PATCH

Subjects: METAANALYSIS

Subjects: INTERVENTION

Subjects: DEPENDENCE

Subjects: SMOKERS

Source: CANADIAN MEDICAL ASSOCIATION JOURNAL v.160 is.11 JUN 1
pp.1577-1581

Language: EN English

Author: Jonasson, IR

Author: Perfit, MR

**Title: Unusual forms of amorphous silica from submarine warm
springs, Juan de Fuca Ridge, northeastern Pacific
Ocean**

Journal/Book Title: CANADIAN MINERALOGIST, 1

Year: 1999

Type: ARTICLE

Abstract: Some unusual forms of amorphous silica were formed in ephemeral warm spring vents along the rift axis of north Cleft Segment, Juan de Fuca Ridge, located off the Oregon coast. They are associated with low mounds constructed by the settling of fine sulfide smoke (pyrite and sphalerite) and precipitation of silica within clumps of juvenile tube-worms that choked vent orifices. The brief period of hydrothermal activity recorded by these mounds is interpreted to be synchronous with incremental spreading events that generated megaplumes in the area in 1989-1990. The earliest forms of silica that cement smoke or soot particles, and comprise 60% of the mound material, consist of microspheroids and amorphous masses. Later forms are more exotic; nested radial sprays of transparent cylindrical needles of silica nucleated on thin layers of spheroids that coat euhedral grains of sulfide minerals. These forms occur only inside worm-tube molds fossilized within sulfide soot matrix materials. They appear to represent the last gasp of waning hydrothermal activity.

Corporate Source: Geol Survey Canada Ottawa ON Canada K1A 0E8 AP

Corporate Source: Univ Florida Gainesville FL USA 32611 AP

Subjects: SPREADING CENTER

Subjects: CLEFT SEGMENT

Subjects: SEA-FLOOR

Subjects: DEPOSITS

Subjects: CHIMNEY

Subjects: RISE

Subjects: GEOCHEMISTRY

Subjects: 21-DEGREES-N

Subjects: MINERALOGY

Subjects: SULFIDES
Source: CANADIAN MINERALOGIST v.37 is.11 FEB pp.27-36

Language: EN English

Author: Wurl, P

Author: Meye, A

Author: Lautenschlager, C

Author: Schmidt, H

Author: Bache, M

Author: Kalthoff, H

Author: Schonfelder, M

Author: Rath, FW

Author: Taubert, H

Title: Clinical relevance of pRb and p53 co-overexpression in soft tissue sarcomas

Journal/Book Title: CANCER LETTERS

Year: 1999

Type: ARTICLE

Abstract: The goal of this study was to examine the relationship between immunohistochemical pRb detectability and p53 overexpression in 198 soft tissue sarcomas (STS) with regard to its clinical relevance. Distinct pRb detectability multivariately shows a correlation to survival rate (relative risk (RR) = 1.59, P = 0.037). p53 positivity was also multivariately correlated to poor prognosis (RR = 2.17, P = 0.0014). Stratification of pRb staining to p53 results shows a prognostical graduation. Patients with negativity for both proteins have the most favorable prognosis (projected 5-year survival rate (psr) = 54.5%). In contrast to this, positivity for both antibodies has the highest risk (RR = 2.48, P = 0.02) and the poorest prognosis (psr = 17.4%). To conclude, these results explain that the clinical relevance of immunohistochemical pRb positivity in STS is connected with p53 in the form of having an increasing effect on the known prognostic relevance of p53 overexpression. (C) 1999 Elsevier Science Ireland Ltd. All rights reserved.

Corporate Source: Univ Halle Wittenberg Halle Germany D-06097 BC

Corporate Source: Univ Leipzig Leipzig Germany D-7010 BC

Corporate Source: Inst Med Epidemiol Biometry & Med Informat Kiel
Germany

Corporate Source: Univ Kiel Kiel Germany

Subjects: RETINOBLASTOMA GENE-PRODUCT

Subjects: TUMOR-SUPPRESSOR GENE

Subjects: RB PROTEIN

Subjects: SUSCEPTIBILITY GENE

Subjects: ALTERED EXPRESSION

Subjects: PROGNOSTIC VALUE

Subjects: CELL CARCINOMA

Subjects: LUNG-CANCER

Subjects: DNA-BINDING

Subjects: IMMUNOHISTOCHEMISTRY

Source: CANCER LETTERS v.139 is.2 MAY 24 pp.159-165

Language: EN English

Author: Varga, C

Author: Horvath, G

Author: Timbrell, V

**Title: On the mechanism of cogenotoxic action between ingested amphibole asbestos fibres and benzo[a]pyrene:
II. Tissue specificity studies using comet assay**

Journal/Book Title: CANCER LETTERS

Year: 1999

Type: ARTICLE

Abstract: Epidemiological data seem to be equivocal on the probable increase in cancer incidence in populations exposed to asbestos-fibre contaminated drinking water. Although animal experiments failed to demonstrate carcinogenicity of oral asbestos exposure, the large surface area of the fibres, however, creates the possibility of cogenotoxic action with adsorbed water-borne organics. In our animal model, rats were gavaged with untreated UICC crocidolite and anthophyllite fibres and fibres that had been allowed to adsorb benzo[a]pyrene molecules from aqueous solutions. Peritoneal macrophages and intestine, parietal peritoneum and omentum samples were obtained from the animals after 24 h. The alkaline single-cell microgel electrophoresis assay (comet assay) was performed on cells isolated from the solid tissues.

Tail moment was applied as a basis of evaluation following image analysis. Our results indicate high levels of DNA strand breaks in the cells prepared from the omentum and intestine. We could also demonstrate a significant potentiating effect of the adsorbed carcinogen on the induction of DNA damage in the omentum, The parietal peritoneum and macrophages were not involved in the early genotoxic alterations under study. Our results support the molecular model of asbestos cocarcinogenesis, including both asbestos-induced deletions and mutations caused by a mutagen carried by the same fibres, (C) 1999 Elsevier Science Ireland Ltd. All rights reserved.

Corporate Source: Debrecen Univ Med Debrecen Hungary H-4012 BC
Corporate Source: Debrecen Univ Med Debrecen Hungary H-4012 BC
Corporate Source: Llandough Hosp Penarth S Glam Wales CF64 2XW AC

Subjects: FIBERS
Subjects: RATS
Subjects: GENOTOXICITY
Subjects: NEUTROPHILS
Source: CANCER LETTERS v.139 is.2 MAY 24 pp.173-176

Language: EN English
Author: Kajihara, Y
Author: Akai, S
Author: Nakagawa, T
Author: Sato, R
Author: Ebata, T
Author: Kodama, H
Author: Sato, K

Title: Enzymatic synthesis of Kdn oligosaccharides by a bacterial alpha-(2 -> 6)-sialyltransferase

Journal/Book Title: CARBOHYDRATE RESEARCH

Year: 1999

Type: ARTICLE

Abstract: Synthesis of CMP-deaminoneuraminic acid (CMP-beta-D-Kdn) and its enzymatic transfer reaction using bacterial alpha-(2 -> 6)-sialyltransferase were examined. CMP-beta-D-Kdn was prepared from methyl 4,5, 7,8,9-penta-O-acetyl-3-deoxy-D-glycero-beta-D- galacto-2-nonulopyranosonate (2) in 24% overall yield. Enzymatic synthesis of Kdn oligosaccharide with CMP-beta-D-Kdn (10.2 mu mol), methyl beta-D-lactosaminide (7, 8.1 mu mol) and purified sialyltransferase (80 munits) afforded Kdn-alpha-(2 -> 6)-Gal-beta-(1 -> 4)-GlcNAc-beta-1-OMe in 77% yield. (C) 1999 Elsevier Science Ltd. All rights reserved.

Corporate Source: Yokohama City Univ Yokohama Kanagawa Japan 2360027
AP

Corporate Source: Kanagawa Univ Yokohama Kanagawa Japan 2218686 AP

Corporate Source: Japan Tobacco Inc Yokohama Kanagawa Japan 2278512
AP

Subjects: DEAMINATED NEURAMINIC ACID
Subjects: SIALIC ACIDS
Subjects: ALPHA-2,6-SIALYLTRANSFERASE
Subjects: IDENTIFICATION
Subjects: CHAINS
Source: CARBOHYDRATE RESEARCH v.315 is.1-2 JAN 31 pp.137-141

Language: EN English
Author: Quennedey, A
Author: Quennedey, B

Title: Development of the wing discs of Zophobas atratus under natural and experimental conditions: occurrence of a gradual larval-pupal commitment in the epidermis of tenebrionid beetles

Journal/Book Title: CELL AND TISSUE RESEARCH

Year: 1999

Type: ARTICLE

Abstract: Using light and electron microscopy, we studied the development of the wing discs in the large beetle Zophobas atratus, under natural and experimental conditions. A reversible differentiation of the wing discs is usually observed during supernumerary instars of crowded larvae. Juvenile hormone analog (JHA) application during the wandering period or compelled experimental crowding during the larval-pupal switchover - or commitment - inhibits the onset of metamorphosis. Isolation, followed by recrowding, also induces the disc cells to secrete unusual cuticular

material. Recrowding is able to trigger the reversal of metamorphosis during the 4-day period when larval-pupal commitment is taking place. Likewise, feeding behaviour which normally stops at commitment often recovers. Ecdysis of intermediate instar animals (prothetelic larvae) corroborates the occurrence of a temporal and spatial variation to commitment, unique to each organ. All these data lead us to consider this 4-day period, which we have called the C period or commitment period, extending from the wandering stage (the previous T period) to the crooked posture stage (i.e. from eyestage 4 to 7) as the physiological time during which the larval organs are gradually committed to differentiate into pupal organs.

Corporate Source: Univ Bourgogne Dijon France F-21000 BC
Subjects: FREEMANI HINTON COLEOPTERA
Subjects: JUVENILE-HORMONE ESTERASE
Subjects: PRECIS-COENIA LEPIDOPTERA
Subjects: BOMBYX-MORI
Subjects: LAST-LARVAL
Subjects: IMAGINAL DISKS
Subjects: ECDYSTEROID TITERS
Subjects: TOBACCO HORNWORM
Subjects: MANDUCA-SEXTA
Subjects: MOLITOR L
Source: CELL AND TISSUE RESEARCH v.296 is.3 JUN pp.619-634

Language: EN English
Author: Wang, XQ
Author: Jacobson, AJ
**Title: Crystal structure of the microporous titanasilicate
ETS-10 refined from single crystal X-ray diffraction
data**

Journal/Book Title: CHEMICAL COMMUNICATIONS
Year: 1999
Type: ARTICLE

Abstract: ETS-10 crystals up to 45 μ m in size have been synthesized at 240 degrees C under a pressure of 80 MPa and the structure refined from single crystal X-ray diffraction data.

Corporate Source: Univ Houston Houston TX USA 77204 AP
Corporate Source: Univ Houston Houston TX USA 77204 AP
Subjects: ABSORPTION SPECTROSCOPY
Subjects: MOLECULAR-SIEVES
Subjects: TITANIUM
Subjects: TIO2
Subjects: NMR
Source: CHEMICAL COMMUNICATIONS v.10 is.11 JUN 7 pp.973-974

Language: EN English
Author: Kugiyama, K
Author: Doi, H
Author: Takazoe, K
Author: Kawano, H
Author: Soejima, H
Author: Mizuno, Y
Author: Tsunoda, R
Author: Sakamoto, T
Author: Nakano, T
Author: Nakajima, K
Author: Ogawa, H
Author: Sugiyama, S
Author: Yoshimura, M
Author: Yasue, H
**Title: Remnant lipoprotein levels in fasting serum predict
coronary events in patients with coronary artery
disease**

Journal/Book Title: CIRCULATION
Year: 1999
Type: ARTICLE

Abstract: Background-Remnant lipoproteins are atherogenic, but assays of remnants have not been available in routine clinical laboratories because of the lack of practical and validated methods. A simple and reliable method for such an assay, using an immunochemical approach, has recently been developed. This study prospectively examined whether remnant lipoprotein levels in fasting serum, measured by our method, may have prognostic value in patients with coronary artery disease (CAD).

Abstract: Methods and Results-Remnant lipoprotein levels in fasting serum were measured in 135 patients with CAD by an immunoaffinity mixed gel containing anti-apolipoprotein (apo) A-1 and anti-apoB-100 monoclonal antibodies. Patients were followed up for less than or equal to 36 months until occurrence of 1 of the following clinical coronary events: recurrent or refractory angina pectoris requiring coronary revascularization, nonfatal myocardial infarction, or cardiac death. Kaplan-Meier analysis demonstrated a significantly higher probability of developing coronary events in patients with the highest tertile of remnant levels (>5.1 mg cholesterol/dL; 75th percentile of distribution of remnant levels) than in those with the lowest tertile of remnant levels (less than or equal to 3.3 mg cholesterol/dL; 50th percentile of the distribution). Higher levels of remnants were a significant and independent predictor of developing coronary events in multivariate Cox hazard analysis including the following covariates: extent of coronary artery stenosis, age, sex, smoking, hypertension, diabetes mellitus, hypercholesterolemia, low HDL cholesterol, and hypertriglyceridemia.

Abstract: Conclusions-Higher levels of remnant lipoproteins in fasting serum predict future coronary events in patients with CAD independently of other risk factors. Thus, measurement of fasting remnant levels, assessed by the current immunoseparation method, may be helpful in assessment of CAD risk.

Corporate Source: Kumamoto Univ Kumamoto Japan 8608556 AC

Corporate Source: Japan Immunores Labs Takasaki Gumma Japan

Subjects: APO A-I

Subjects: TRIGLYCERIDE-RICH

Subjects: CHOLESTEROL

Subjects: PROGRESSION

Subjects: ANGIOGRAPHY

Subjects: PLASMA

Subjects: B-100

Source: CIRCULATION v.99 is.22 JUN 8 pp.2858-2860

Language: EN English

Author: Nakayama, M

Author: Yasue, H

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Author: Kugiyama, K

Author: Ogawa, H

Author: Motoyama, T

Author: Saito, Y

Author: Ogawa, Y

Author: Miyamoto, Y

Author: Nakao, K

Title: T-786 -> C mutation in the 5'-flanking region of the endothelial nitric oxide synthase gene is associated with coronary spasm

Journal/Book Title: CIRCULATION

Year: 1999

Type: ARTICLE

Abstract: Background-Coronary spasm plays an important role in the pathogenesis of ischemic heart diseases in general. However, the precise mechanism(s) responsible for coronary spasm remains to be elucidated, and we examined the molecular genetics of coronary spasm.

Abstract: Methods and Results-We searched for the possible mutations in the endothelial nitric oxide synthase (eNOS) gene in patients with coronary spasm. In this study, we demonstrate the existence of 3 linked mutations in the 5'-flanking region of the eNOS gene (T-786-->C, A(-922)-->G, and T-1468-->A). The incidence of the mutations was significantly greater in patients with coronary spasm than in the control group ($P<0.0001$). Multiple logistic regression analysis with forward stepwise selection using the environmental risk factors and the eNOS gene variant revealed that the most predictive independent risk factor for coronary spasm was the mutant allele ($P<0.0001$). As assessed by luciferase reporter gene assays, the T-786-->C mutation resulted in a significant reduction in eNOS gene promoter activity ($P<0.05$), whereas neither the A(-922) -->G nor the T-1468-->A mutation had any effect.

Abstract: Conclusions-Taken together, these findings strongly suggest that the T-786-->C mutation in the eNOS gene reduces the endothelial NO synthesis and predisposes the patients with the mutation to coronary spasm.

Corporate Source: Kumamoto Univ Kumamoto Japan 8608556 AC

Corporate Source: Kyoto Univ Kyoto Japan 606 AC

Subjects: ARTERIAL SPASM

Subjects: INTRACORONARY INJECTION

Subjects: VARIANT ANGINA

Subjects: CIGARETTE-SMOKING
Subjects: ACETYLCHOLINE
Subjects: PATHOGENESIS
Subjects: DISEASE
Subjects: RISK
Subjects: VASOCONSTRICTION
Subjects: NITROGLYCERIN
Source: CIRCULATION v.99 is.22 JUN 8 pp.2864-2870

Language: EN English
Author: Mittleman, MA
Author: Mintzer, D
Author: Maclure, M
Author: Tofler, GH
Author: Sherwood, JB
Author: Muller, JE

Title: Triggering of myocardial infarction by cocaine

Journal/Book Title: CIRCULATION

Year: 1999

Type: ARTICLE

Abstract: Background-Cocaine has been implicated as a trigger of acute myocardial infarction in patients with and those without underlying coronary atherosclerosis. However, the magnitude of the increase in risk of acute myocardial infarction immediately after cocaine use remains unknown.

Abstract: Methods and Results-In the Determinants of Myocardial Infarction Onset Study, we interviewed 3946 patients (1282 women) with acute myocardial infarction an average of 4 days after infarction onset. Data were collected on the use of cocaine and other potential triggers of myocardial infarction. We compared the reported use of cocaine in the hour preceding the onset of myocardial infarction symptoms with its expected frequency by using self-matched control data based on the case-crossover study design. Of the 3946 patients interviewed, 38 (1%) reported cocaine use in the prior year and 9 reported use within the 60 minutes preceding the onset of infarction symptoms. Compared with nonusers, cocaine users were more likely to be male (87% vs 674, $P = 0.01$), current cigarette smokers (84% vs 32%, $P < 0.001$), younger (44 ± 8 vs 61 ± 13 years, $P < 0.001$), and minority group members (63% vs 11%, $P < 0.001$). The risk of myocardial infarction onset was elevated 23.7 times over baseline (95% CI 8.5 to 66.3) in the 60 minutes after cocaine use. The elevated risk rapidly decreased thereafter.

Abstract: Conclusions-Cocaine use is associated with a large abrupt and transient increase in the risk of acute myocardial infarction in patients who are otherwise at relatively low risk. This finding suggests that studying the pathophysiological changes produced by cocaine may provide insights into the mechanisms by which myocardial infarction is triggered by other stressors.

Corporate Source: Harvard Univ Boston MA USA 02215 AP
Corporate Source: Harvard Univ Boston MA USA 02115 AP
Corporate Source: Harvard Univ Boston MA USA 02115 AP
Corporate Source: Univ Kentucky Lexington KY USA 40536 AP

Subjects: CORONARY-ARTERY DISEASE
Subjects: SMOOTH-MUSCLE CELLS
Subjects: INTRANASAL COCAINE
Subjects: PHYSICAL EXERTION
Subjects: CASE-CROSSOVER
Subjects: VASOCONSTRICTION
Subjects: RISK
Subjects: ABUSE
Subjects: ONSET
Subjects: RESPONSIVENESS

Source: CIRCULATION v.99 is.21 JUN 1 pp.2737-2741

Language: EN English
Author: Dube, A
Author: Akbarali, Y
Author: Sato, TN
Author: Libermann, TA
Author: Oettgen, P

Title: Role of the Ets transcription factors in the regulation of the vascular-specific Tie2 gene

Journal/Book Title: CIRCULATION RESEARCH

Year: 1999

Type: ARTICLE

Abstract: The Tie2 gene encodes a vascular endothelium-specific receptor tyrosine kinase that is required for normal vascular development and is also upregulated during angiogenesis. The regulatory regions of the Tie2 gene that are required for endothelium-specific gene expression in vivo have been identified. However, the transcription factors required for Tie2 gene expression remain largely unknown. We have identified highly conserved binding sites for Ets transcription factors in the Tie2 promoter. Mutations in 2 particular binding sites lead to a 50% reduction in the endothelium-specific activity of the promoter. We have compared the ability of several members of the Ets family to transactivate the Tie2 promoter. Our results demonstrate that 1 of 3 distinct isoforms of the novel Ets transcription factor NERF, NERF2, is expressed in endothelial cells and can strongly transactivate the regulatory regions of the Tie2 gene in comparison to other Ets factors, which have little or no effect. NERF2 can bind to the Tie2 promoter Ets sites in electrophoretic mobility shift assays. These studies support a role for Ets factors in the regulation of vascular-specific gene expression and suggest that the novel Ets factor NERF2 may be a critical transcription factor in specifying the expression of the Tie2 gene in vascular endothelial cells.

Corporate Source: Beth Israel Deaconess Med Ctr Boston MA USA 02215

AP

Corporate Source: Beth Israel Deaconess Med Ctr Boston MA USA 02215

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Corporate Source: Univ Texas Dallas TX USA

Subjects: ENDOTHELIAL GROWTH-FACTOR

Subjects: RECEPTOR TYROSINE KINASES

Subjects: BINDING-SITES

Subjects: DIHYDROFOLATE-REDUCTASE

Subjects: TRANSGENIC MICE

Subjects: IN-VIVO

Subjects: EXPRESSION

Subjects: PROMOTER

Subjects: ENHANCER

Subjects: FAMILY

Source: CIRCULATION RESEARCH v.84 is.10 MAY 28 pp.1177-1185

Language: EN English

Author: Stahle, I

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Author: Barile, M

Author: Brandsch, R

Title: Anti-mitochondrial flavoprotein autoantibodies of patients with myocarditis and dilated cardiomyopathy (anti-M7): interaction with flavin-carrying proteins, effect of vitamin B2 and epitope mapping

Journal/Book Title: CLINICAL AND EXPERIMENTAL IMMUNOLOGY

Year: 1999

Type: ARTICLE

Abstract: Vitamin B2 and flavin cofactors are transported tightly bound to immunoglobulin in human serum. We reasoned that anti-mitochondrial flavoprotein autoantibodies (alpha Fp-AB) present in the serum of patients with myocarditis and cardiomyopathy of unknown aetiology may form immunoglobulin aggregates with these serum proteins. However, immunodiffusion and Western blot assays demonstrated that the flavin-carrying proteins were not recognized by alpha Fp-AB. Apparently the flavin moiety in the native protein conformation was inaccessible to alpha Fp-AB. This conclusion was supported by the absence of an immunoreaction between the riboflavin-binding protein from egg white and alpha Fp-AB. Intravenous application of vitamin B2 to rabbits immunized with 6-hydroxy-D-nicotine oxidase, a bacterial protein carrying covalently attached FAD, did not neutralize alpha Fp-AB which had been raised in the serum of the animals. FAD-carrying peptides generated from 6-hydroxy-D-nicotine oxidase by trypsin and chymotrypsin treatment were not recognized by the alpha Fp-AB, but those generated by endopeptidase Lys were. This demonstrates that the epitope recognized by alpha Fp-AB comprises, besides the flavin moiety, protein secondary structure elements.

Corporate Source: Univ Freiburg Freiburg Germany D-79104 BC

Corporate Source: Univ Bari Bari Italy

Subjects: RIBOFLAVIN

Subjects: FAD

Source: CLINICAL AND EXPERIMENTAL IMMUNOLOGY v.115 is.3 MAR pp.404-408

Language: EN English

Author: Griffioen, PH

Author: Zwang, L
Author: van Schaik, RHN
Author: Engel, H
Author: Lindemans, J
Author: Cobbaert, CM

Title: Optimization of apolipoprotein(a) genotyping with pulsed field gel electrophoresis

Journal/Book Title: CLINICAL CHEMISTRY, 1

Year: 1999

Type: ARTICLE

Abstract: Background: Increased lipoprotein(a) is a risk factor for atherosclerosis, and its concentration in serum is inversely correlated with the size of the apolipoprotein(a) [apo(a)] component. The size of the apo(a) gene is determined mainly by the Kringle IV size polymorphism. We have optimized and characterized pulsed field gel electrophoresis (PFGE) for apo(a) genotyping. Methods: Established PFGE protocols were adjusted. The changes included the following: (a) increased DNA yields by the use of all leukocytes for isolation from either 3 mL of fresh EDTA whole blood or 250 μ L of frozen buffy coats; (b) increased efficiency of Kpn1 digestion by the inclusion of a digestion buffer wash; (c) reduction of assay time by the use of capillary blotting; (d) increased sensitivity by the use of four digoxigenin-labeled apo(a) probes; and (e) identification using a single film by the inclusion of a digoxigenin-labeled lambda marker probe in addition to apo(a) probes in the hybridization mix.

Abstract: Results: In older Caucasians, 93% (buffy coats, n=468) were heterozygous for apo(a) gene size. An inverse correlation between serum lipoprotein(a) and the sum of Kringle IV alleles was found ($y = -23x + 1553$; $r = -0.442$; $n = 468$). Gel-to-gel variation was minimal (3%). Imprecision (SD) was one Kringle IV repeat (control sample containing eight fragments of 72-233 kb; n=34 electrophoretic runs).

Abstract: Conclusions: The practicality and sensitivity of the apo(a) genotyping technique by PFGE were improved, and accuracy and reproducibility were preserved. The optimized procedure is promising for apo(a) genotyping on frozen buffy coats from large epidemiological studies. (C) 1999 American Association for Clinical Chemistry.

Corporate Source: Univ Hosp Dijkzigt Rotterdam Netherlands NL-3000 CA BC

Corporate Source: St Sophia Hosp Zwolle Netherlands NL-8000 GK BC

Corporate Source: Hosp De Baronie Breda Netherlands NL-4800 RL BC

Subjects: LIPOPROTEIN(A)

Subjects: POLYMORPHISM

Source: CLINICAL CHEMISTRY v.45 is.6 JUN pp.771-776

Language: EN English

Author: Thorp, JA

Author: White, RD

Author: Westergom, KL

Author: O'Connor, MA

Title: Intracranial haemorrhage in premature neonates - Epidemiology and prevention

Journal/Book Title: CNS DRUGS

Year: 1999

Type: ARTICLE

Abstract: Prematurity is the most important risk factor for intracranial haemorrhage (ICH). Many aetiological factors contribute to ICH in neonates, including trauma with labour, mode of delivery, acidemia, hypoxia, hypercarbia, immaturity of the coagulation system, change in newborn blood pressure, and newborn stress from resuscitation. Antenatal initiatives to prevent ICH have focused on advancing gestational age, pharmacological interventions, optimising acid-base status and limiting intrapartum trauma. Neonatal initiatives have focused on pharmacological and supportive measures which stabilise cerebral blood flow and oxygen delivery by local and systemic actions. The potential for pharmacological agents which could reduce capillary bleeding or act as antioxidants to further prevent ICH remain a pressing research need.

Corporate Source: St Lukes Perinatal Ctr Kansas City MO USA 64111

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Corporate Source: Univ Missouri Kansas City MO USA 64110 AP

Corporate Source: Obstetrix Med Grp Kansas & Missouri Kansas City MO USA

Corporate Source: Mem Hosp S Bend South Bend IN USA

Corporate Source: Indiana Univ South Bend IN USA 46615 AP

Subjects: LOW-BIRTH-WEIGHT

Subjects: ANTENATAL PHENOBARBITAL THERAPY

Subjects: PERIVENTRICULAR-INTRAVENTRICULAR HEMORRHAGE

Subjects: GERMINAL MATRIX HEMORRHAGE

Subjects: VITAMIN-E SUPPLEMENTATION

Subjects: LOW-DOSE INDOMETHACIN
Subjects: 34 WEEKS GESTATION
Subjects: PRETERM INFANTS
Subjects: PROPHYLACTIC INDOMETHACIN
Subjects: ANTICONVULSANT THERAPY
Source: CNS DRUGS v.11 is.6 JUN pp.421-433

Language: EN English
Author: DeCaprio, AP
Title: The toxicology of hydroquinone - Relevance to occupational and environmental exposure
Journal/Book Title: CRITICAL REVIEWS IN TOXICOLOGY
Year: 1999
Type: REVIEW

Abstract: Hydroquinone (HQ) is a high-volume commodity chemical used as a reducing agent, antioxidant, polymerization inhibitor, and chemical intermediate. It is also used in over-the-counter (OTC) drugs as an ingredient in skin lighteners and is a natural ingredient in many plant-derived products, including vegetables, fruits, grains, coffee, tea, beer, and wine. While there are few reports of adverse health effects associated with the production and use of HQ, a great deal of research has been conducted with HQ because it is a metabolite of benzene. Physicochemical differences between HQ and benzene play a significant role in altering the pharmacokinetics of directly administered when compared with benzene-derived HQ. HQ is only weakly positive in in vivo chromosomal assays when expected human exposure routes are used. Chromosomal effects are increased significantly when parenteral or in vitro assays are used. In cancer bioassays, HQ has reproducibly produced renal adenomas in male F344 rats. The mechanism of tumorigenesis is unclear but probably involves a species-, strain-, and sex-specific interaction between renal tubule toxicity and an interaction with the chronic progressive nephropathy that is characteristic of aged male rats. Mouse liver tumors (adenomas) and mononuclear cell leukemia (female F344 rat) have also been reported following HQ exposure, but their significance is uncertain. Various tumor initiation/promotion assays with HQ have shown generally negative results. Epidemiological studies with HQ have demonstrated lower death rates and reduced cancer rates in production workers when compared with both general and employed referent populations. Parenteral administration of HQ is associated with changes in several hematopoietic and immunologic endpoints. This toxicity is more severe when combined with parenteral administration of phenol. It is likely that oxidation of HQ within the bone marrow compartment to the semiquinone or p-benzoquinone (BQ), followed by covalent macromolecular binding, is critical to these effects. Bone marrow and hematologic effects are generally not characteristic of HQ exposures in animal studies employing routes of exposure other than parenteral. Myelotoxicity is also not associated with human exposure to HQ. These differences are likely due to significant route-dependent toxicokinetic factors. Fetotoxicity (growth retardation) accompanies repeated administration of HQ at maternally toxic dose levels in animal studies. HQ exposure has not been associated with other reproductive and developmental effects using current USEPA test guidelines. The skin pigment lightening properties of HQ appear to be due to inhibition of melanocyte tyrosinase. Adverse effects associated with OTC use of HQ in FDA-regulated products have been limited to a small number of cases of exogenous ochronosis, although higher incidences of this syndrome have been reported with inappropriate use of unregulated OTC products containing higher HQ concentrations. The most serious human health effect related to HQ is pigmentation of the eye and, in a small number of cases, permanent corneal damage. This effect has been observed in HQ production workers, but the relative contributions of HQ and BQ to this process have not been delineated. Corneal pigmentation and damage has not been reported at current exposure levels of <2 mg/m³. Current work with HQ is being focused on tissue-specific HQ-glutathione metabolites. These metabolites appear to play a critical role in the renal effects observed in F344 rats following HQ exposure and may also be responsible for bone marrow toxicity seen after parenteral exposure to HQ or benzene-derived HQ.

Corporate Source: McLaren Hart Inc Albany NY USA 12203 AP
Subjects: MOUSE BONE-MARROW
Subjects: BENZENE METABOLITE HYDROQUINONE
Subjects: SISTER-CHROMATID EXCHANGES
Subjects: SUSPECTED SPINDLE POISONS
Subjects: PROSTAGLANDIN-H SYNTHASE
Subjects: DNA ADDUCT FORMATION
Subjects: SPRAGUE-DAWLEY RATS
Subjects: TARGET-CELL SUSCEPTIBILITY
Subjects: GRANULOPHOETIC STEM-CELLS
Subjects: COLONY-STIMULATING FACTOR
Source: CRITICAL REVIEWS IN TOXICOLOGY v.29 is.3 MAY
pp.283-330

Language: EN English
Author: Cole, DL

Title: The efficacy of acibenzolar-S-methyl, an inducer of systemic acquired resistance, against bacterial and fungal diseases of tobacco

Journal/Book Title: CROP PROTECTION

Year: 1999

Type: ARTICLE

Abstract: Acibenzolar-S-methyl, a benzothiadiazole (BTH), is a novel plant protection product that mimics the pathogen-host interaction and results in systemic acquired resistance in plants. It protected tobacco plants against several diseases. Few necrotic lesions of wildfire (*Pseudomonas syringae* pv *tabaci* tox +), and angular leaf spot (*Ps. syringae* pv *tabaci* tox-) were apparent on 10-week-old seedlings sprayed with acibenzolar-S-methyl (Bion 50% wg) alone or plus copper oxychloride (60% sc), and point-inoculated with the pathogens 7 days later. In outdoor seedbeds, seedlings were sprayed two or three times with acibenzolar-S-methyl (0.05 g-0.1 g a.i. m⁻²), copper oxychloride (0.52-1.56 g a.i. m⁻²) or, in the 1996-97 season only, a mixture of both, starting 7 weeks after sowing. All plots, including the unsprayed, were inoculated with *Ps. syringae* pv *tabaci* tox + (10(7) cfu ml⁻¹) 7 days after the first spray. Although copper oxychloride reduced the incidence of wildfire, plants that had been sprayed with acibenzolar-S-methyl were disease-free but there was mild phytotoxicity. Wildfire symptoms were not evident on these seedlings at field transplanting, but in 1996-1997, 9 weeks later 72% of the unsprayed and 2.7 and 4.7%, respectively, of plants treated with acibenzolar-S-methyl and acibenzolar-S-methyl + copper oxychloride in the seedbed plus one field spray (30 g a.i. acibenzolar-S-methyl ha⁻¹) had symptoms. In both seasons, a natural infection of rhizoctonia leaf spot (*Thanatephorus cucumeris*) was less prevalent on plants sprayed with acibenzolar-S-methyl. In the 1997-1998 season, both seedbed-sprayed only and seedbed plus two field sprays of acibenzolar-S-methyl reduced the incidence of frog-eye leaf spot on field plants and the amount of barn spot (both caused by *Cercospora nicotianae*) in the colouring phase of leaf curing. Yield and quality were not adversely affected by acibenzolar-S-methyl. (C) 1999 Elsevier Science Ltd. All rights reserved.

Corporate Source: Kutsaga Res Stn Harare Zimbabwe

Subjects: SALICYLIC-ACID

Subjects: LEAF-SPOT

Subjects: CUCUMBER

Subjects: PROTEIN

Subjects: PATHWAY

Source: CROP PROTECTION v.18 is.4 MAY pp.267-273

Language: EN English

Author: Kroke, A

Author: Liese, AD

Author: Keil, U

Author: Boeing, H

Title: Arterial hypertension and glycemia In non-diabetic subjects: Is there an association independent of obesity

Journal/Book Title: DIABETES-METABOLISM RESEARCH AND REVIEWS

Year: 1999

Type: ARTICLE

Abstract: Background A possible association of glycemia with arterial hypertension has been suggested by the frequent co-occurrence of impaired glucose tolerance or Type 2 diabetes mellitus with arterial hypertension. The objective was to examine the relationship of glycated hemoglobin (HbA(1c)) concentration with arterial hypertension status in non-diabetic subjects.

Abstract: Methods A cross-sectional analysis of baseline data from the EPIC-Potsdam Cohort Study, Germany, was performed. The study population comprised 1846 non-diabetic subjects, 772 men and 1074 women, age 35-65. Blood pressure was measured three times consecutively. Level of HbA(1c) was determined by an assay based on monoclonal antibodies. Body height, weight and circumferences were obtained. Arterial hypertension status was either determined through blood pressure measurement (blood pressure greater than or equal to 160/95 mmHg) or based on antihypertensive drug use. HbA(1c) was divided into sex-specific quintiles and logistic regression was used to estimate the odds of being hypertensive and the corresponding confidence intervals.

Abstract: Results The highest compared to the lowest quintiles of HbA(1c) were in univariate analysis associated with being hypertensive. Adjustment for age and body mass index completely removed any significant association with arterial hypertension status. The odds ratio in men was 1.1 (95% CI 0.7-1.8), and in women it was 0.9 (95% CI 0.5-1.4). Repeating the analysis with systolic and diastolic blood pressure among untreated hypertensives yielded similar results.

Abstract: Conclusion Unlike previous studies, our data do not support an association of HbA(1c) with arterial hypertension that is statistically independent of age and body mass index. Whether these established arterial hypertension risk factors are truly confounders of the HbA(1c)-arterial hypertension association or rather potentially antecedent factors requires further study. Copyright (C) 1999 John Wiley & Sons, Ltd.

Corporate Source: German Inst Human Nutr Bergholz Rehbrücke Germany
D-14558 BC

Subjects: CARDIOVASCULAR RISK-FACTORS
Subjects: BLOOD-PRESSURE
Subjects: GLUCOSE-TOLERANCE
Subjects: LIPID-METABOLISM
Subjects: FOLLOW-UP
Subjects: INSULIN
Subjects: MELLITUS
Subjects: MEN
Subjects: GLYCOSYLATION
Subjects: POPULATION
Source: DIABETES-METABOLISM RESEARCH AND REVIEWS v.15 is.2
MAR-APR pp.99-105

Language: EN English
Author: Serrano-Rios, M
Author: Goday, A
Author: Larrad, TM

Title: Migrant populations and the incidence of type 1 diabetes mellitus: an overview of the literature with a focus on the Spanish-Heritage countries in Latin America

Journal/Book Title: DIABETES-METABOLISM RESEARCH AND REVIEWS
Year: 1999
Type: REVIEW

Abstract: Type 1 diabetes mellitus (DM) is a 'chronic' autoimmune disorder leading to the destruction of the pancreatic beta cell. The natural history of diabetes includes a long subclinical (prediabetes) period. The pathogenesis is multifactorial and characterized by the interaction of environmental factors, with predisposing genes, most of which are associated with the HLA DR DQ loci. The relatively recent development of worldwide incidence registries for Type 1 DM has allowed us to compare the epidemiological results obtained in most parts of the world. This approach is particularly valuable in analysing the effects of migration of populations from one area of the world where the incidence of Type 1 DM is different (usually lower) to a new geographic setting. Properly designed migrant studies may be valuable in uncovering whether the genetic background remains more important than the new 'exposure' as illustrated by the Sardinian migration to Lazio and Lombardy. The presence of some putative 'protective' environmental exposures or the absence of those prevalent in the country of origin may explain the usually lower Type 1 DM incidence observed in most countries (Chile, Peru, Mexico) sharing a 'Spanish caucasoid genetic pool', and even in relatively genetically homogeneous groups such as Japanese populations migrating to Hawaii. In fact, the disease is caused by both genetic and environmental factors and to convince the scientific community of this fact is a primary responsibility for epidemiologists. Copyright (C) 1999 John Wiley & Sons, Ltd.

Corporate Source: Hosp Univ San Carlos Madrid Spain 28040 AC

Corporate Source: Hosp Mar Barcelona Spain 08003 AC

Subjects: CHILDHOOD-ONSET IDDM
Subjects: HLA-DQ
Subjects: MOLECULAR-GENETICS
Subjects: LAZIO REGION
Subjects: RISK-FACTORS
Subjects: YOUNG DAISY
Subjects: AGE-GROUP
Subjects: INSULIN
Subjects: EPIDEMIOLOGY
Subjects: CHILDREN

Source: DIABETES-METABOLISM RESEARCH AND REVIEWS v.15 is.2
MAR-APR pp.113-132

Language: EN English
Author: Muntoni, S
Author: Muntoni, S

Title: New insights into the epidemiology of type 1 diabetes in Mediterranean countries

Journal/Book Title: DIABETES-METABOLISM RESEARCH AND REVIEWS
Year: 1999
Type: REVIEW

Abstract: In Mediterranean countries, the incidence (per 100 000 per year) of Type 1 diabetes in children aged under 15 years shows wide variation from country to country, ranging from 2.45 in Macedonia to 34.4 in Sardinia. By interacting with environmental factors such as diet, toxins or viral infections, the HLA plus non-HLA genes of susceptibility or resistance to Type 1 diabetes so far identified are the strongest determinants of the disease as far as incidence, age at onset and sex ratio are concerned. The distribution of these genes in the Mediterranean region is still not completely known.

Abstract: Sardinians are the most suitable population for studying such phenomena for three main reasons: their genetic features have been repeatedly analysed in depth; their incidence rate of Type 1 diabetes is by far the highest in the Mediterranean area; and considerable colonies of Sardinian emigrants settled in neighbouring low-incidence Italian regions. Studies on Spaniards and Jews have also contributed to a better understanding of the respective roles of genetic and environmental factors. From a body of research on the Mediterranean populations, it can be concluded that great genetic heterogeneity accounts for the wide variation in incidence of Type 1 diabetes, while rather ubiquitous environmental factors trigger the disease in genetically predisposed individuals. Copyright (C) 1999 John Wiley & Sons, Ltd.

Corporate Source: MEDICO Assoc Cagliari Cagliari Italy

Corporate Source: Univ Cagliari Cagliari Italy

Subjects: ISLET-CELL ANTIBODIES

Subjects: AGE-GROUP

Subjects: IDDM INCIDENCE

Subjects: CONFERS SUSCEPTIBILITY

Subjects: GENETIC SUSCEPTIBILITY

Subjects: LAZIO REGION

Subjects: MELLITUS

Subjects: CHILDHOOD

Subjects: RISK

Subjects: HLA

Source: DIABETES-METABOLISM RESEARCH AND REVIEWS v.15 is.2

MAR-APR pp.133-140

Language: EN English

Author: Gray, DWR

**Title: Type 1 diabetes: the facts fit a deficient inhibitory
signal given by MHC class II**

Journal/Book Title: DIABETES-METABOLISM RESEARCH AND REVIEWS

Year: 1999

Type: REVIEW

Abstract: This paper presents a hypothesis regarding the aetiology of Type 1 (autoimmune) diabetes, which suggests that autoimmunity is normally prevented by an inhibitory or negative signal delivered by MHC molecules, and that in Type 1 diabetes it is the inability of beta cells to deliver sufficient negative signal from MHC Class II that drives the underlying autoimmune process. Based on a broad survey of the diabetes literature, a list of clinical, pathological, experimental and epidemiological 'facts' about Type 1 diabetes is presented which are considered to be widely accepted as proven. The new theory is then compared to other recent theories on the aetiology of diabetes with regard to its ability to explain these accepted 'facts'. Copyright (C) 1999 John Wiley & Sons, Ltd.

Corporate Source: John Radcliffe Hosp Oxford England OX3 9DU AC

Subjects: PANCREATIC BETA-CELLS

Subjects: COMPLEX CLASS-I

Subjects: GLUTAMIC-ACID DECARBOXYLASE

Subjects: RECENT EPIDEMIOLOGIC DATA

Subjects: TUMOR NECROSIS FACTOR

Subjects: INSULIN GENE REGION

Subjects: REGULATORY T-CELLS

Subjects: AUTOIMMUNE-DISEASE

Subjects: INTERFERON-GAMMA

Subjects: NOD MICE

Source: DIABETES-METABOLISM RESEARCH AND REVIEWS v.15 is.1

JAN-FEB pp.29-41

Language: EN English

**Title: Is fasting glucose sufficient to define diabetes?
Epidemiological data from 20 European studies**

Journal/Book Title: DIABETOLOGIA

Year: 1999

Type: ARTICLE

Abstract: Aims/hypothesis. The World Health Organisation Consultation recommended new diagnostic criteria for diabetes mellitus including: lowering of the diagnostic fasting plasma glucose to 7.0 mmol/l and introduction of a new category: impaired fasting glycaemia. The diagnostic 2-h glucose concentrations for diabetes and for impaired glucose tolerance were unchanged. This study identifies fasting plasma glucose concentrations predicting a diabetic 2-h plasma glucose of 11.1 mmol/l or more, analyses the sensitivity and specificity of different screening strategies for diabetes and describes the cardiovascular risk profile in people with impaired fasting glycaemia.

Abstract: Methods. European population based studies (n = 17) or large, representative samples of employees (n = 3) with both fasting and 2-h post load glucose concentrations following 75-g oral glucose tolerance tests were included (18 918 men and 10 190 women). The Iceland study (8881 men and 9407 women) is presented separately as a 50-g glucose load was used.

Abstract: Results. The fasting plasma glucose predicting a 2-h plasma glucose of 11.1 mmol/l or more with optimal sensitivity and specificity was a) 5.8 mmol/l in women and 6.4 mmol/l in men; b) independent of age; c) increased with obesity. Fasting plasma glucose of 7.0/7.8 mmol/l or more predicted a diabetic 2-h plasma glucose with sensitivities of 49.0/29.8% and specificities of 98.2/99.7 %, respectively.

Abstract: Conclusion/Interpretation. If fasting glucose is used alone, the 31% of diabetic subjects with a non-diabetic fasting glucose but a diabetic 2-h glucose, will not be diagnosed; impaired fasting glycaemia and impaired glucose tolerance do not identify the same people; the risk profile of people with impaired fasting glycaemia depends on 2-h glucose concentrations. Obesity is the main confounder in the association between fasting and 2-h glucose.

Corporate Source: Steno Diabet Ctr Gentofte Denmark DK-2820 BC

Subjects: CORONARY HEART-DISEASE

Subjects: RISK-FACTORS

Subjects: DIAGNOSTIC-CRITERIA

Subjects: FOLLOW-UP

Subjects: TOLERANCE

Subjects: POPULATION

Subjects: PREVALENCE

Subjects: MELLITUS

Subjects: INSULIN

Subjects: NIDDM

Source: DIABETOLOGIA v.42 is.6 JUN pp.647-654

Language: EN English

Author: Wrehlke, C

Author: Wiedemeyer, WR

Author: Schmitt-Wrede, HP

Author: Mincheva, A

Author: Lichter, P

Author: Wunderlich, F

Title: Genomic organization of mouse gene zfp162

Journal/Book Title: DNA AND CELL BIOLOGY

Year: 1999

Type: ARTICLE

Abstract: We report the cloning and characterization of the alternatively spliced mouse gene zfp162, formerly termed mzf1, the homolog of the human ZFM1 gene encoding the splicing factor SF1 and a putative signal transduction and activation of RNA (STAR) protein. The zfp162 gene is about 14 kb long and consists of 14 exons and 13 introns. Comparison of zfp162 with the genomic sequences of ZFM1/SF1 revealed that the exon-intron structure and exon sequences are well conserved between the genes, whereas the introns differ in length and sequence composition. Using fluorescent in situ hybridization, the zfp162 gene was assigned to chromosome 19, region B. Screening of a genomic library integrated in lambda DASH II resulted in the identification of the 5'-flanking region of zfp162. Sequence analysis of this region showed that zfp162 is a TATA-less gene containing an initiator control element and two CCAAT boxes. The promoter exhibits the following motifs: AP-2, CRE, Ets, GRE, HNF5, MRE, SP-1, TRE, TCF1, and PU.1. The core promoter, from position -331 to -157, contains the motifs CRE, SP-1, MRE, and AP-2, as determined in transected CHO-K1 cells and IC-21 cells by reporter gene assay using a secreted form of human placental alkaline phosphatase. The occurrence of PU.1/GRE supports the view that the zfp162 gene encodes a protein involved not only in nuclear RNA metabolism, as the human ZFM1/SF1, but also in as yet unknown macrophage-inherent functions.

Corporate Source: Univ Dusseldorf Dusseldorf Germany D-40225 BC

Corporate Source: Univ Dusseldorf Dusseldorf Germany D-40225 BC

Corporate Source: German Canc Res Ctr Heidelberg Germany D-69120 BC

Subjects: SPLICING FACTOR SF1

Subjects: SIGNAL-TRANSDUCTION

Subjects: TRANSCRIPTIONAL REPRESSOR

Subjects: RESPONSE ELEMENT

Subjects: RNA

Subjects: PROTEINS
Subjects: BINDING
Subjects: INTERACTS
Subjects: ACTIVATION
Subjects: ZFM1
Source: DNA AND CELL BIOLOGY v.18 is.5 MAY pp.419-428

Language: EN English

Author: Gelkopf, M

Author: Bleich, A

Author: Hayward, R

Author: Bodner, G

Author: Adelson, M

Title: Characteristics of benzodiazepine abuse in methadone maintenance treatment patients: a 1 year prospective study in an Israeli clinic

Journal/Book Title: DRUG AND ALCOHOL DEPENDENCE

Year: 1999

Type: ARTICLE

Abstract: We aimed to study the prevalence patterns and course of benzodiazepine (BZD) abuse in an Israeli methadone maintenance (MMT) clinic using repeated random observed urine analysis as well as self-report data. Lifetime and current prevalence of BZD abuse were found in 66.3 and 50.8% patients, respectively. It was found that 44.6% of patients who abused BZDs during their first month of treatment ceased to do so after 1 year, while 27.4% who had not abused BZDs at the beginning of MMT did so after 1 year in treatment. Flunitrazepam was the most commonly abused BZD (92.9%), followed by diazepam (54.3%) and oxazepam (38.6%). Most of the patients swallowed BZDs (92.8%), 42.9% also smoked or snorted them while 8.6% injected BZDs intravenously. BZDs were used as self-medication for alleviating emotional problems rather than for recreational or other reasons. We conclude that BZD abuse is a significant clinical problem in heroin addicts both before entering and during MMT. MMT may have a positive as well as a negative influence on BZD abuse with the former being more prevalent. (C) 1999 Elsevier Science Ireland Ltd. All rights reserved.

Corporate Source: Tel Aviv Elias Sourasky Med Ctr Tel Aviv Israel

IL-64924 BC

Corporate Source: Tel Aviv Univ Tel Aviv Israel IL-69978 BC

Corporate Source: Rockefeller Univ New York NY USA 10021 AP

Subjects: INJECTING DRUG-USERS

Subjects: PSYCHOTROPIC-DRUGS

Subjects: HEROIN USERS

Subjects: PREVALENCE

Subjects: DETOXIFICATION

Subjects: CONSUMPTION

Subjects: TEMAZEPAM

Subjects: BEHAVIOR

Subjects: PATTERNS

Subjects: PROGRAM

Source: DRUG AND ALCOHOL DEPENDENCE v.55 is.1-2 JUN 1
pp.63-68

Language: EN English

Author: Booth, RE

Author: Kwiatkowski, CF

Author: Weissman, G

Title: Health-related service utilization and HIV risk behaviors among HIV infected Injection drug users and crack smokers

Journal/Book Title: DRUG AND ALCOHOL DEPENDENCE

Year: 1999

Type: ARTICLE

Abstract: This study was designed to assess utilization of health-related services and HIV risk related behaviors by HIV infected drug users one year prior to and two years following the availability of Ryan White Title I funding. Using a cross-sectional design, a total of 777 drug injectors and crack smokers from five US cities were surveyed, over three waves of data collection, about their use of drug treatment, medical services, housing, mental health, and case management and about their sex and drug-related risk behaviors. For all service categories and in each wave, including

the year prior to Title I funding, HIV risk behaviors were lower among those who used health-related services, with the exception of housing. Use of services did not increase significantly following the disbursement of Title I funds except for housing and case management. These findings suggest that it may be necessary to increase the attractiveness of health-related services, not just funding for services, for HIV infected substance abusers. (C) 1999 Elsevier Science Ireland Ltd. All rights reserved.

Corporate Source: Univ Colorado Denver CO USA 80211 AP

Corporate Source: Bur Hlth Resources Dev Denver CO USA

Subjects: HUMAN-IMMUNODEFICIENCY-VIRUS

Subjects: NEW-YORK-CITY

Subjects: SEXUALLY-TRANSMITTED DISEASES

Subjects: OUT-OF-TREATMENT

Subjects: COCAINE USE

Subjects: PREVENTIVE BEHAVIOR

Subjects: ABUSE TREATMENT

Subjects: SAN-FRANCISCO

Subjects: AIDS

Subjects: SEROCONVERSION

Source: DRUG AND ALCOHOL DEPENDENCE v.55 is.1-2 JUN 1
pp.69-78

Language: EN English

Author: Collins, RL

Author: Gollnisch, G

Author: Morsheimer, ET

Title: Substance use among a regional sample of female nurses

Journal/Book Title: DRUG AND ALCOHOL DEPENDENCE

Year: 1999

Type: ARTICLE

Abstract: We assessed the prevalence of licit (e.g. alcohol) and illicit (e.g. cocaine) drug use, as well as prescription (e.g. tranquilizers) and over-the-counter medications (e.g. analgesics), in a regional sample of female nurses. Surveys were mailed to a random sample of 4000 nurses in Western New York. The survey focused on lifetime and current use of substances, negative consequences of alcohol consumption and dependence. Three mailings resulted in a return of 2400 (60%) surveys, of which 1951 (49%) were usable. We examined lifetime and current use in each of the four classes of substances in the context of nursing related-factors (e.g. type of nurse, nursing specialty, work setting) and demographic characteristics (e.g. age, marital status). There were significant differences within each of the different groupings. Lifetime experience of negative consequences were relatively rare and few nurses reported dependence on substances other than tobacco and caffeine. (C) 1999 Elsevier Science Ireland Ltd. All rights reserved.

Corporate Source: Res Inst Addict Buffalo NY USA 14203 AP

Subjects: SMOKING-BEHAVIOR

Subjects: UNITED-STATES

Subjects: REGISTERED NURSES

Subjects: ALCOHOL

Subjects: PREVALENCE

Subjects: TOBACCO

Subjects: HEALTH

Subjects: STRESS

Subjects: WOMEN

Source: DRUG AND ALCOHOL DEPENDENCE v.55 is.1-2 JUN 1
pp.145-155

Language: EN English

Author: Fang, JY

Author: Chen, SS

Author: Huang, YB

Author: Wu, PC

Author: Tsai, YH

Title: In vitro study of transdermal nicotine delivery:

Influence of rate-controlling membranes and adhesives

Journal/Book Title: DRUG DEVELOPMENT AND INDUSTRIAL PHARMACY

Year: 1999

Type: ARTICLE

Abstract: The objective of this study was to evaluate the influence of a rate-controlling membrane and adhesive

on the in vitro permeation of nicotine. The physicochemical properties of the adhesive, including adhesion and rheology (viscosity), were also detected. Higher permeability of nicotine was observed through a hydrophilic membrane than through a hydrophobic membrane. Natural rubber and silicone were used as the adhesive bases, respectively. The silicone adhesive showed the highest adhesion among all adhesive formulations. To increase the adhesion of natural rubber, a tackifier (polyisoprene) and a secondary tackifier (terpene polymer; Px 1150(R)) were incorporated into the formulations to achieve acceptable adhesion. The nicotine permeation through silicone adhesive and three natural rubber adhesives with the secondary tackifier (2%, 4%, and 6% Px 1150) was close to that from a commercially available patch (Habitrol(R)), although the loading amount of nicotine was not the same. A longer lag time during the in vitro permeation study of nicotine was required for the adhesives prepared in our laboratory than for the commercially available patch.

Corporate Source: Kaohsiung Med Coll Kaohsiung Taiwan

Corporate Source: Taipei Med Coll Taipei Taiwan

Subjects: SODIUM

Source: DRUG DEVELOPMENT AND INDUSTRIAL PHARMACY v.25 is.6 JUN

1 pp.789-794

Language: EN English

Author: Stout, PR

Author: Ruth, JA

Title: Deposition of [H-3]cocaine, [H-3]nicotine, and [H-3]flunitrazepam in mouse hair melanosomes after systemic administration

Journal/Book Title: DRUG METABOLISM AND DISPOSITION

Year: 1999

Type: ARTICLE

Abstract: Microautoradiography was employed to show that association of drugs from the serum directly with forming hair pigment is a primary pathway of deposition into the hair. After systemic administration of [H-3]flunitrazepam, [H-3]nicotine, and [H-3]cocaine, association of all three drugs with melanin in the forming hair was observed within minutes of dosage. Sebum was determined to be an insignificant deposition route for all three drugs. Pigmented mice had significantly higher concentrations of all three drugs than did nonpigmented mice. The results provide a better basis for ultimately using hair for reliable analysis of drug and environmental toxin exposure.

Corporate Source: Univ Colorado Denver CO USA 80262 AP

Subjects: IN-VITRO

Subjects: COCAINE BINDING

Subjects: MELANIN

Subjects: DRUGS

Subjects: NICOTINE

Subjects: ABUSE

Source: DRUG METABOLISM AND DISPOSITION v.27 is.6 JUN

pp.731-735

Language: EN English

Author: Blandi, P

Author: De Lalla, A

Author: Volpi, L

Author: Di Perri, T

Title: Stimulation of endogenous adenosine release by oral administration of quercetin and resveratrol in man

Journal/Book Title: DRUGS UNDER EXPERIMENTAL AND CLINICAL RESEARCH

Year: 1999

Type: ARTICLE

Abstract: Epidemiological evidence indicates that moderate alcohol consumption is associated with a significant decrease in the incidence of certain cardiovascular disorders, which can lead to impaired quality of life and to death. However, there are no objective data suggesting a cause-effect relationship and detailed research based on definitive working hypotheses is needed. We tested two flavonoids in man and found that these substances can belong, at least in part, to a wine-dependent mechanism, which leads to increased adenosine plasma levels. If these results could be confirmed by analyzing all the possible influences leading to blood nucleoside increase, a hypothesis of diet-dependent cellular preconditioning could be discussed.

Corporate Source: Univ Siena Siena Italy I-53100 BC

Subjects: RED WINE

Subjects: MORTALITY

Subjects: SERUM

Language: EN English

Author: Ruf, JC

**Title: Wine and polyphenols related to platelet aggregation
and atherothrombosis**

Journal/Book Title: DRUGS UNDER EXPERIMENTAL AND CLINICAL RESEARCH

Year: 1999

Type: ARTICLE

Abstract: Epidemiological studies have demonstrated an inverse correlation between moderate wine and alcohol consumption and morbidity and mortality from coronary heart disease (CHD). This protective effect has been associated with an increase in the plasma level of high density lipoprotein (HDL)-cholesterol, as it is well known that plasma HDL is inversely correlated with CHD. In addition, it has become evident that blood platelets contribute to the rate of development of atherosclerosis and CHD through several mechanisms. Recent studies have shown HDL-cholesterol levels can explain only 50% of the protective effect of alcoholic beverages. The other 50% may be partly related to decreased platelet activity. The antiplatelet activity of wine is explained not only by ethanol but also by the polyphenolic components with which red wines are richly endowed. Several studies carried out in humans and animals have shown that wine phenolics could exert their effects by reducing prostanoid synthesis from arachidonate. In addition, it has been suggested that wine phenolics could reduce platelet activity mediated by nitric oxide. Moreover, wine phenolics increase vitamin E levels while decreasing the oxidation of platelets submitted to oxidative stress. However a rebound phenomenon of hyperaggregability is observed after acute alcohol consumption but not after wine consumption. This protection afforded by wine has been duplicated in animals with grape phenolics added to alcohol. This rebound phenomenon could explain ischemic strokes or sudden deaths known to occur after episodes of drunkenness. It appears that wine and wine phenolics in particular could significantly inhibit platelet aggregation and that this could explain, at least in part, the protective effect of red wine against atherosclerosis and coronary heart disease.

Corporate Source: Int Wine & Vine Off Paris France F-75008 BC

Subjects: CORONARY HEART-DISEASE

Subjects: MODERATE ALCOHOL-CONSUMPTION

Subjects: ANTIPLATELET ACTIVITY

Subjects: SERUM-LIPIDS

Subjects: CYCLIC-AMP

Subjects: RED WINE

Subjects: ETHANOL

Subjects: INHIBITION

Subjects: RESVERATROL

Subjects: FLAVONOIDS

Source: DRUGS UNDER EXPERIMENTAL AND CLINICAL RESEARCH v.25
is.2-3 JUN pp.125-131

Language: EN English

Author: Li, HW

Author: Lucy, AP

Author: Guo, HS

Author: Li, WX

Author: Ji, LH

Author: Wong, SM

Author: Ding, SW

**Title: Strong host resistance targeted against a viral
suppressor of the plant gene silencing defence
mechanism**

Journal/Book Title: EMBO JOURNAL

Year: 1999

Type: ARTICLE

Abstract: The 2b protein encoded by cucumber mosaic cucumovirus (Cmv2b) acts as an important virulence determinant by suppressing post-transcriptional gene silencing (PTGS), a natural plant defence mechanism against viruses. We report here that the tomato aspermy cucumovirus 2b protein (Tav2b), when expressed from the unrelated tobacco mosaic tobamovirus (TMV) RNA genome, activates strong host resistance responses to TMV in tobacco which are typical of the gene-for-gene disease resistance mechanism. Domain swapping between Cmv2b, which does not elicit these responses, and Tav2b, revealed functional domains in Tav2b critical for triggering virus resistance and hypersensitive cell death. Furthermore, substitution of two amino acids from Tav2b by those found at the same positions in

Cmv2b, Lys21-->Val and Arg28-->Ser, abolished the ability to induce hypersensitive cell death and virus resistance. However, in *Nicotiana benthamiana*, a species related to tobacco, Tav2b functions as a virulence determinant and suppresses PTGS. Thus, a viral suppressor of the host gene silencing defence mechanism is the target of another independent host resistance mechanism. Our results provide new insights into the complex molecular strategies employed by viruses and their hosts for defence, counter-defence and counter counter-defence.

Corporate Source: Inst Mol Agrobiol Singapore Singapore 117604 AC

Corporate Source: Natl Univ Singapore Singapore 117604 AC

Subjects: SYSTEMIC ACQUIRED-RESISTANCE

Subjects: CUCUMBER MOSAIC-VIRUS

Subjects: DISEASE RESISTANCE

Subjects: HYPERSENSITIVE RESPONSE

Subjects: COAT PROTEIN

Subjects: PATHOGEN INTERACTIONS

Subjects: MEDIATED RESISTANCE

Subjects: NUCLEOTIDE-SEQUENCE

Subjects: SECRETION SYSTEM

Subjects: FUNGAL PATHOGEN

Source: EMBO JOURNAL v.18 is.10 MAY 17 pp.2683-2691

Language: EN English

Author: Walden, R

Author: Hayashi, H

Author: Lubenow, H

Author: Czaja, I

Author: Schell, J

**Title: Auxin Inducibility and developmental expression of axi
1: a gene directing auxin independent growth in
tobacco protoplasts (Retraction of vol 13, pg 4729,
1994)**

Journal/Book Title: EMBO JOURNAL

Year: 1999

Type: CORRECTION, ADDITION

Source: EMBO JOURNAL v.18 is.10 MAY 17 pp.2908-2908

Language: EN English

Author: Ko, GTC

Author: Yeung, VTF

Author: Chow, CC

Author: Cockram, CS

Title: Clinical characteristics of acromegaly in Hong Kong

Journal/Book Title: ENDOCRINE RESEARCH

Year: 1999

Type: ARTICLE

Abstract: This study analyses the clinical characteristics of acromegalic patients in Hong Kong. All patients with acromegaly under follow up in Prince of Wales Hospital, Hong Kong between January 1984 and December 1992 were reviewed retrospectively. Detailed hospital notes were available for review in 28 out of 34. Of the 28 patients with full records available, 27 were Chinese and 1 was Nepalese. There were 8 (28.6%) males and 20 (71.4%) females. The mean age (+/- SD) at presentation was 51.2 +/- 16.8 years (range: 28 to 84 years) (male, 49.9 +/- 13.9 years [range: 28-66]; female, 51.7 +/- 18.1 years [range: 31-84]; p-value: NS). The commonest mode of presentation (n=22, 78.6%) was clinical suspicion by medical staff during consultation for other conditions, acromegaly being later confirmed. The estimated duration of symptoms, before diagnosis, was 14 years (range: 1 to 30 years). CT scan imaging of the pituitary gland showed that 12 patients (42.9%) had pituitary macro-adenomas (greater than or equal to 1 cm), 3 (10.7%) had micro-adenomas (<1 cm), 6 (21.4%) had normal imaging, 1 (3.6%) had an empty sella and 6 (21.4%) had suspicious but inconclusive lesions in the pituitary gland.

Abstract: Surgery was offered as initial treatment to all patients. 4 to 6 weeks after surgery, if the maximal growth hormone response following glucose loading exceeded 10 mu g/L, radiotherapy was offered. Of the 28 patients, 13 received surgery and radiotherapy, 2 surgery only, 4 radiotherapy only, 4 no treatment and 5 defaulted. At presentation, 50% had some abnormality of glucose tolerance. The mean early morning fasting baseline growth hormone was 52.8 +/- 37.0 mu g/L (mean +/- SD, median: 48.1 mu g/L) and the maximal growth hormone response during an extended oral glucose tolerance test was 63.2 +/- 34.9 mu g/L (median: 61.3 mu g/L). Forty five percents of patients had a maximal growth hormone response exceeding 60 mu g/L. Of the 19 patients who underwent surgery and/or radiotherapy, 15 had their pituitary function reassessed 6 months after intervention. Their early morning

fasting growth hormone and maximal growth hormone response in an extended oral glucose tolerance test were 21.3 +/- 25.8 and 35.4 +/- 37.5 μ g/L, respectively. In conclusion, acromegaly in Hong Kong has an estimated annual incidence of 3.8 per million. There is a female preponderance, tendency to late presentation (>10 years) and low number of large tumors. Up to 80% were referred following observer suspicion.

Corporate Source: Chinese Univ Hong Kong Shatin Hong Kong

Subjects: HORMONE-RELEASING HORMONE

Subjects: HUMAN GROWTH-HORMONE

Subjects: ISLET-CELL TUMOR

Subjects: SOMATOMEDIN-C

Subjects: MANIFESTATIONS

Subjects: EPIDEMIOLOGY

Subjects: SECRETION

Subjects: CANCER

Subjects: PLASMA

Source: ENDOCRINE RESEARCH v.25 is.2 MAY 17 pp.195-206

Language: EN English

Author: Witchel, SF

Title: Molecular diagnosis in the congenital adrenal hyperplasias

Journal/Book Title: ENDOCRINOLOGIST

Year: 1999

Type: REVIEW

Abstract: The congenital adrenal hyperplasias are a group of autosomal recessive disorders caused by mutations in the steroidogenic enzyme genes. Availability of the nucleotide sequences of these genes and development of molecular genotyping techniques allow a diagnosis to be verified at the molecular level. Molecular diagnosis can aid decision making regarding prenatal dexamethasone therapy and the need for glucocorticoid therapy in atypical patients. Correlation of phenotype with genotype has facilitated genetic counseling. Genetic epidemiology also depends on molecular diagnosis. Investigation of mutations identified in patients is providing insight into the relationship between a protein structure and its function. This article provides an overview of genotyping methodology and its applications.

Corporate Source: Univ Pittsburgh Pittsburgh PA USA 15213 AP

Subjects: STEROID 21-HYDROXYLASE DEFICIENCY

Subjects: 3-BETA-HYDROXYSTEROID DEHYDROGENASE GENE

Subjects: 17-ALPHA-HYDROXYLASE 17,20-LYASE DEFICIENCY

Subjects: 11-BETA-HYDROXYLASE DEFICIENCY

Subjects: MISSENSE MUTATIONS

Subjects: HIGH-FREQUENCY

Subjects: CYP21B GENE

Subjects: TENASCIN-X

Subjects: GENOTYPE

Subjects: PHENOTYPE

Source: ENDOCRINOLOGIST v.9 is.3 MAY-JUN pp.197-207

Language: EN English

Author: Paciolla, MD

Author: Davies, G

Author: Jansen, SA

Title: Generation of hydroxyl radicals from metal-loaded humic acids

Journal/Book Title: ENVIRONMENTAL SCIENCE & TECHNOLOGY

Year: 1999

Type: ARTICLE

Abstract: Humic acids (HAs) are naturally occurring biopolymers that are ubiquitous in our environment. They are most commonly found in the soil, drinking water, and a variety of plants. Pharmacological and therapeutic studies involving humic acids have been reported to some extent. However, when certain transition metals are bound to humic acids, e.g., iron and copper, they can be harmful to biological organisms. For this study, humic acids were extracted from German, Irish, and New Hampshire soils that were selectively chosen because of their rich abundance in humic material. Each sample was treated at room temperature with 0.1 M ferric and cupric solutions for 48 h. The amount of iron and copper adsorbed by humic acid was accurately quantitated using atomic absorption spectroscopy. We further demonstrate that these metal-loaded humic acids can produce deleterious oxidizing species such as the hydroxyl radical (HO \cdot) through the metal-driven Fenton reaction. Electron paramagnetic resonance (EPR) employing spin trapping techniques with 5,

5;dimethylpyrroline N-oxide (DMPO) is used to confirm the generation of hydroxyl radicals. The DMPO-OH adduct with hyperfine splitting constants $A(N) = A(H) = 14.9$ G is observed upon the addition of exogenous hydrogen peroxide. The concentration of hydroxyl radical was determined using 4-hydroxytempo (TEMPO-OH) as a spin standard. The presence of another oxidizing species, $Fe=O(2+)$, is also proposed in the absence of hydrogen peroxide.

Corporate Source: Temple Univ Philadelphia PA USA 19122 AP

Corporate Source: Northeastern Univ Boston MA USA 02115 AP

Subjects: LUNG-TISSUE

Subjects: DRINKING-WATER

Subjects: BY-PRODUCTS

Subjects: RAT-LIVER

Subjects: DISINFECTION

Subjects: MUTAGENICITY

Subjects: SUBSTANCES

Subjects: SMOKERS

Source: ENVIRONMENTAL SCIENCE & TECHNOLOGY v.33 is.11 JUN 1
pp.1814-1818

Language: EN English

Author: Nikova, V

Author: Pundeva, R

Author: Petkova, A

Title: *Nicotiana tabacum* L-as a source of cytoplasmic male sterility in interspecific cross with *N. alata* Link & Otto

Journal/Book Title: EUPHYTICA

Year: 1999

Type: ARTICLE

Abstract: A new source of cytoplasmic male sterility (CMS) in tobacco with interspecific origin is reported. In traditional selection wild tobacco species have been used as donors of cytoplasm. In the present study the cultivated species *Nicotiana tabacum* L. ($n = 24$) is a source of CMS. It was used as female parent and *N. alata* ($n = 9$) was involved as a pollinator. The F-1 hybrid of this cross was completely sterile. Tissue culture method was applied to restore the female fertility. Regenerants obtained from the 5th passage were successfully pollinated with *N. tabacum* and seed-containing capsules were formed. All BC1P1 plants were male sterile. They possessed normally developed corollas, three-loculed or deformed pistils, and 1-2 stamens modified into secondary pistils. In some plants stamenless flowers were observed. Male sterility of BC1P1 was preserved in BC2P1-BC7P1 progenies confirming its cytoplasmic nature.

Corporate Source: Bulgarian Acad Sci Sofia Bulgaria BU-1113 BC

Source: EUPHYTICA v.107 is.1 MAY pp.9-12

Language: EN English

Author: Tavladoraki, P

Author: Girotti, A

Author: Donini, M

Author: Arias, FJ

Author: Mancini, C

Author: Morea, V

Author: Chiaraluce, R

Author: Consalvi, V

Author: Benvenuto, E

Title: A single-chain antibody fragment is functionally expressed in the cytoplasm of both *Escherichia coli* and transgenic plants

Journal/Book Title: EUROPEAN JOURNAL OF BIOCHEMISTRY

Year: 1999

Type: ARTICLE

Abstract: Despite the well-known crucial role of intradomain disulfide bridges for immunoglobulin folding and stability, the single-chain variable fragment of the anti-viral antibody F8 is functionally expressed when targeted to the reducing environment of the plant cytoplasm. We show here that this antibody fragment is also functionally expressed in the cytoplasm of *Escherichia coli*. A gel shift assay revealed that the single-chain variable fragment (scFv) accumulating in the plant and bacterial cytoplasm bears free sulphydryl groups. Guanidinium chloride denaturation/renaturation studies indicated that refolding occurs even in a reducing environment, producing a functional molecule with the same spectral properties of the native scFv(Fs). Taken together, these results suggest that folding and functionality of this antibody

fragment are not prevented in a reducing environment. This antibody fragment could therefore represent a suitable framework for engineering recombinant antibodies to be targeted to the cytoplasm.

Corporate Source: CR Casaccia Rome Italy I-00100 BC

Corporate Source: CR Casaccia Rome Italy I-00100 BC

Corporate Source: IRBM P Angeletti Rome Italy

Corporate Source: Univ Rome La Sapienza Rome Italy

Subjects: DISULFIDE BONDS

Subjects: FV PROTEIN

Subjects: TOBACCO

Subjects: FLUORESCENCE

Subjects: STABILITY

Subjects: CYTOSOL

Subjects: RESOLUTION

Subjects: BACTERIAL

Subjects: MUTATIONS

Subjects: EVOLUTION

Source: EUROPEAN JOURNAL OF BIOCHEMISTRY v.262 is.2 JUN
pp.617-624

Language: EN English

Author: Palli, D

Author: Decarli, A

Author: Russo, A

Author: Cipriani, F

Author: Giacosa, A

Author: Amadori, D

Author: Salkeld, R

Author: Salvini, S

Author: Buiatti, E

**Title: Plasma levels of antioxidant vitamins and cholesterol
in a large population sample in Central-Northern Italy**

Journal/Book Title: EUROPEAN JOURNAL OF NUTRITION

Year: 1999

Type: ARTICLE

Abstract: Background: In a population-based multicenter case-control study of diet, life-style, and gastric cancer a large series of adults, aged 30-75 years (mean 58.9 years), were randomly sampled from the general population in 3 areas of Central-Northern Italy.

Abstract: Aim of the study: To evaluate the relationship between plasma levels of antioxidant vitamins and cholesterol, and sociodemographic characteristics, life-style factors, and dietary intake of selected nutrients in a sample of the Italian population.

Abstract: Methods: A fasting blood sample was available for 945 subjects (553 men, 392 women). The plasma concentrations of ascorbic acid, carotene, retinol, alpha-tocopherol, and cholesterol were determined by a centralized laboratory. All participants answered to a detailed questionnaire collecting information on sociodemographic and anthropometric characteristics, smoking, alcohol drinking, and dietary habits. Covariance analysis models, with post hoc Dunnett tests, including terms for age, sex, study center, and period of blood drawing, were used for selected multiple-way comparisons of mean values of plasma nutrients.

Abstract: Results: Mean plasma values of retinol were higher among men while women had higher levels of plasma carotene, ascorbic acid, alpha-tocopherol, and cholesterol. Plasma carotene levels showed an inverse association with body mass index, alcohol consumption, and smoking and a positive association with social class. Carotene concentrations were higher in plasma samples obtained in spring/summer, while ascorbic acid levels were higher in autumn/winter. Partial correlation coefficients between plasma vitamin levels showed a strong correlation between carotene and ascorbic acid (0.69 in men; 0.74 in women), between carotene and alpha-tocopherol (0.44; 0.37), and between alpha-tocopherol and ascorbic acid (0.45; 0.41). Plasma alpha-tocopherol and retinol correlated with plasma cholesterol. On the other hand, plasma carotene and ascorbic acid were correlated with their estimated dietary intakes, while the intakes of other nutrients, as expected, correlated rather poorly with the respective plasma concentrations.

Abstract: Conclusions: Socio-economic factors, life-style, and specific nutrient intake, in addition to gender, are related to nutrient plasma levels in Italian adults and may provide specific suggestions for the prevention of chronic diseases.

Corporate Source: Ctr Studio & Prevenz Oncol Florence Italy I-50131

BC

Corporate Source: Univ Milan Milan Italy I-20122 BC

Corporate Source: Ist Nazi Tumori Milan Italy I-20133 BC

Corporate Source: Ist Nazi Ric Canc Genoa Italy I-16132 BC

Corporate Source: Osped L Pierantoni Forli Italy

Corporate Source: Hoffmann La Roche Basel Switzerland

Corporate Source: Ist Europeo Oncol Milan Italy

Corporate Source: USL Citta Bologna & Ravenna Reg Emilia Romagna Bologna
Italy

Subjects: ALPHA-TOCOPHEROL LEVELS
Subjects: FOOD-FREQUENCY QUESTIONNAIRE
Subjects: GREEN-YELLOW VEGETABLES
Subjects: DIETARY BETA-CAROTENE
Subjects: GASTRIC-CANCER
Subjects: HEALTHY INHABITANTS
Subjects: ALCOHOL-CONSUMPTION
Subjects: ELDERLY POPULATION
Subjects: SERUM CAROTENOIDS
Subjects: DETERMINANTS

Source: EUROPEAN JOURNAL OF NUTRITION v.38 is.2 APR pp.90-98

Language: EN English

Author: Duthie, SJ

Author: Dobson, VL

**Title: Dietary flavonoids protect human colonocyte DNA from
oxidative attack in vitro**

Journal/Book Title: EUROPEAN JOURNAL OF NUTRITION

Year: 1999

Type: ARTICLE

Abstract: Background & Aims: Epidemiological studies suggest that antioxidant polyphenols in the human diet may protect against diseases such as cancer. In this study we investigated the cytoprotective potential of the flavonoids, quercetin, myricetin, kaempferol and rutin against oxidative DNA damage in human colonocytes in vitro. Abstract:

Methods: Caco-2 cells, which display specialised enterocyte/colonocyte cell functions, were used as an in vitro model for human colonocytes. Hydrogen peroxide was employed as the oxidant. DNA damage (strand breakage, oxidised purines and oxidised pyrimidines) was determined using the alkaline single cell gel electrophoresis or comet assay. Cell growth and viability were measured.

Abstract: Results: Hydrogen peroxide caused a dose-dependent increase in DNA strand breakage in human colonocytes, presumably via oxygen free radical generation. Quercetin and myricetin protected Caco-2 cells against oxidative attack. In addition, quercetin decreased hydrogen peroxide-mediated inhibition of growth.

Neither rutin nor kaempferol was effective. However, quercetin, while inhibiting DNA strand breakage, did not alter the levels of oxidised bases following peroxide treatment. The antifungal agent ketoconazole, prevented quercetin cytoprotection in Caco-2 cells, indicating that P450-mediated metabolism may alter the efficacy of the flavonoids against oxidative DNA damage.

Abstract: Conclusion: Flavonoids, particularly quercetin, the most abundant flavonoid in the human diet, are likely to be important in defending human colonocytes from oxidative attack.

Corporate Source: Rowett Res Inst Aberdeen Scotland AB21 9SB AC

Subjects: CORONARY-HEART-DISEASE
Subjects: DAMAGE STRAND BREAKS
Subjects: CELL-LINE CACO-2
Subjects: HUMAN-LYMPHOCYTES
Subjects: COMET ASSAY
Subjects: ANTIOXIDANT
Subjects: CANCER
Subjects: QUERCETIN
Subjects: DIFFERENTIATION
Subjects: METABOLISM

Source: EUROPEAN JOURNAL OF NUTRITION v.38 is.1 FEB pp.28-34

Language: EN English

Author: Sherwood, RA

Author: Keating, J

Author: Kavvadia, V

Author: Greenough, A

Author: Peters, TJ

**Title: Substance misuse in early pregnancy and relationship
to fetal outcome**

Journal/Book Title: EUROPEAN JOURNAL OF PEDIATRICS

Year: 1999

Type: ARTICLE

Abstract: To establish the frequency of substance misuse in early pregnancy in an urban UK population, 807

consecutive positive pregnancy test urine samples were screened for a range of drugs, including cotinine as an indicator of maternal smoking habits. A positive test for cannabinoids was found in 117 (14.5%) samples. Smaller numbers of samples were positive for other drugs:- opiates (11), benzodiazepines (4), cocaine (3 and one each for amphetamines and methadone. Polydrug use was detected in nine individuals. Only two samples tested positive for ethanol. The proportion with a urine cotinine level indicative of active smoking was 34.3%. The outcome of the pregnancy was traced for 288 subjects. Cannabis use was associated with a lower gestational age at delivery ($P < 0.005$), an increased risk of prematurity ($P < 0.02$) and reduction in birth weight ($P < 0.002$). Whilst maternal smoking was associated with a reduction in infant birth weight ($P < 0.05$), this was less pronounced than the effect of other substance misuse. Abstract: Conclusion This study suggests that one in six women in South London are using drugs in early pregnancy and that cannabinoid use is associated with a poorer pregnancy outcome.

Corporate Source: Univ London Kings Coll London England SE5 9PJ AC

Corporate Source: Univ London Kings Coll London England

Subjects: LOW-BIRTH-WEIGHT

Subjects: COCAINE USE

Subjects: ILLICIT-DRUG

Subjects: ALCOHOL-USE

Subjects: GROWTH

Subjects: MARIJUANA

Subjects: ABUSE

Subjects: PREMATURITY

Subjects: PREVALENCE

Subjects: POPULATION

Source: EUROPEAN JOURNAL OF PEDIATRICS v.158 is.6 JUN
pp.488-492

Language: EN English

Author: Hsieh, TC

Author: Wu, JM

Title: Differential effects on growth, cell cycle arrest, and
induction of apoptosis by resveratrol in human
prostate cancer cell lines

Journal/Book Title: EXPERIMENTAL CELL RESEARCH

Year: 1999

Type: ARTICLE

Abstract: Epidemiologic studies have suggested that nutrition plays an important role in carcinogenesis and that 30% of cancer morbidity and mortality can potentially be prevented with proper adjustment of diets. Resveratrol, a polyphenol present in red wines and a variety of human foods, has recently been reported to exhibit chemopreventive properties when tested in a mouse skin cancer model system. In this study, we investigated the effects of resveratrol on growth, induction of apoptosis, and modulation of prostate-specific gene expression using cultured prostate cancer cells that mimic the initial (hormone-sensitive) and advanced (hormone-refractory) stages of prostate carcinoma. Androgen-responsive LNCaP and androgen-nonresponsive DU-145, PC-3, and JCA-1 human prostate cancer cells were cultured with different concentrations of resveratrol (2.5×10^{-5} - 10^{-7} Ri). Cell growth, cell cycle distribution, and apoptosis were determined. Addition of 2.5×10^{-5} M resveratrol led to a substantial decrease in growth of LNCaP and in PC-3 and DU-145 cells, but only had a modest inhibitory effect on proliferation of JCA-1 cells. Flow cytometric analysis showed resveratrol to partially disrupt G(1)/S transition in all three androgen-nonresponsive cell lines, but had no effect in the androgen-responsive LNCaP cells. In difference to the androgen-nonresponsive prostate cancer cells however, resveratrol causes a significant percentage of LNCaP cells to undergo apoptosis and significantly lowers both intracellular and secreted prostate-specific antigen (PSA) levels without affecting the expression of the androgen receptor (AR). These results suggest that resveratrol negatively modulates prostate cancer cell growth, by affecting mitogenesis as well as inducing apoptosis, in a prostate cell-type-specific manner. Resveratrol also regulates PSA gene expression by an AR-independent mechanism. (C) 1999 Academic Press.

Corporate Source: New York Med Coll Valhalla NY USA 10595 AP

Subjects: RECEPTOR ANTAGONIST

Subjects: ESTROGEN-RECEPTOR

Subjects: ANDROGEN RECEPTOR

Subjects: EPITHELIAL-CELLS

Subjects: LNCAP

Subjects: ANTIGEN

Subjects: CARCINOMA

Subjects: CHEMOPREVENTION

Subjects: ESTABLISHMENT

Subjects: EXPRESSION

Source: EXPERIMENTAL CELL RESEARCH v.249 is.1 MAY 25

Language: EN English

Author: Susi, P

Author: Pehu, E

Author: Lehto, K

Title: Replication in the phloem is not necessary for efficient vascular transport of tobacco mosaic tobamovirus (vol 447, pg 121, 1999)

Journal/Book Title: FEBS LETTERS

Year: 1999

Type: CORRECTION, ADDITION

Corporate Source: Univ Helsinki Helsinki Finland FIN-00014 BC

Corporate Source: Univ Turku Turku Finland 20014 AC

Source: FEBS LETTERS v.451 is.2 MAY 21 pp.214-214

Language: EN English

Author: Akre, O

Author: Cnattingius, S

Author: Bergstrom, R

Author: Kvist, U

Author: Trichopoulos, D

Author: Ekborn, A

Title: Human fertility does not decline: evidence from Sweden

Journal/Book Title: FERTILITY AND STERILITY

Year: 1999

Type: ARTICLE

Abstract: Objective: To assess changes in human fertility over time. analyses and age-period-cohort modeling. Setting: Sweden, 1983-1993.

women aged greater than or equal to 20 years during the study period. There were 401,653 women who were identified through the nationwide Medical Birth Register.

Measure(s): Risk of subfertility, defined as greater than or equal to 1 year of involuntary childlessness.

Result(s): Subfertility problems decreased dramatically over successive maternal birth cohorts. Further, the risk of subfertility increased with age and decreased with increasing formal education.

Abstract: Design: Time-trend
Abstract: Patient(s): All primiparous
Abstract: Intervention(s): None.
Abstract: Main Outcome
Abstract: Conclusion(s): A decrease in male fertility cannot be ruled out on the basis of these results, but if present, it is minor and totally outweighed by other favorable developments. As the main explanation for our findings, we propose a decrease in the prevalence of secondary subfertility as a result of the eradication of gonorrhea. (Fertil Steril(R) 1999, 71:1066-9. (C) 1999 by American Society for Reproductive Medicine.).

Corporate Source: Karolinska Inst Stockholm Sweden S-17177 BC

Subjects: PELVIC INFLAMMATORY DISEASE

Subjects: FEMALE INFERTILITY

Subjects: TEMPORAL VARIATION

Subjects: COHORT MODELS

Subjects: CANCER RATES

Subjects: AGE PERIOD

Subjects: SMOKING

Subjects: QUALITY

Subjects: BIRTH

Subjects: TIME

Source: FERTILITY AND STERILITY v.71 is.6 JUN pp.1066-1069

Language: GE German

Author: Holstein, A

Author: Egberts, EH

Author: Ring, C

Title: The investigation of fresh meat for Trichinae - efficiency and necessity

Journal/Book Title: FLEISCHWIRTSCHAFT

Year: 1999

Type: ARTICLE

Abstract: The cost-benefit relationships of the carcasses by carcass investigation of fresh meat for the presence of *Trichinella*, as required by law throughout the EU, are frequently put in question. In Germany, up to 10 cases of human trichinellosis are registered officially each year. As a rule, these infections have been acquired abroad or are caused by parasites in imported meat. In a case study of trichinellosis acquired in Germany by two members of a family, the efficiency and necessity of the trichinae investigation as it is carried out in Germany is discussed. The total current prevalence for 1998 for the whole of Europe of more than 2 600 officially registered human trichinellosis cases, of which more than 420 were in France and Italy alone, highlights the serious epidemiological relevance of this disease. Thus a reliable trichinae inspection from which no *Trichinella* hosts are exempt remains a very necessary preventive measure. For the practising physician in Germany, human trichinellosis represents an extremely rare occurrence. The lack of personal experience and poor specific knowledge often results in lengthy delays in the recognition of this potentially fatal disease in which early diagnosis is important.

Corporate Source: Klinikum Lippe Detmold Detmold Germany D-32756 BC

Source: FLEISCHWIRTSCHAFT v.79 is.5 MAR pp.82-84

Language: EN English

Author: Xu, HE

Author: Rould, MA

Author: Xu, WQ

Author: Epstein, JA

Author: Maas, RL

Author: Pabo, CO

Title: Crystal structure of the human Pax6 paired domain-DNA complex reveals specific roles for the linker region and carboxy-terminal subdomain in DNA binding

Journal/Book Title: GENES & DEVELOPMENT

Year: 1999

Type: ARTICLE

Abstract: Pax6, a transcription factor containing the bipartite paired DNA-binding domain, has critical roles in development of the eye, nose, pancreas, and central nervous system. The 2.5 Angstrom structure of the human Pax6 paired domain with its optimal 26-bp site reveals extensive DNA contacts from the amino-terminal subdomain, the linker region, and the carboxy-terminal subdomain. The Pax6 structure not only confirms the docking arrangement of the amino-terminal subdomain as seen in cocrystals of the *Drosophila* Prd Pax protein, but also reveals some interesting differences in this region and helps explain the sequence specificity of paired domain-DNA recognition. In addition, this structure gives the first detailed information about how the paired linker region and carboxy-terminal subdomain contact DNA. The extended linker makes minor groove contacts over an 8-bp region, and the carboxy-terminal helix-turn-helix unit makes base contacts in the major groove. The structure and docking arrangement of the carboxy-terminal subdomain of Pax6 is remarkably similar to that of the amino-terminal subdomain, and there is an approximate twofold symmetry axis relating the polypeptide backbones of these two helix-turn-helix units. Our structure of the Pax6 paired domain-DNA complex provides a framework for understanding paired domain-DNA interactions, for analyzing mutations that map in the linker and carboxy-terminal regions of the paired domain, and for modeling protein-protein interactions of the Pax family proteins.

Corporate Source: MIT Cambridge MA USA 02139 AP

Corporate Source: MIT Cambridge MA USA 02139 AP

Corporate Source: Harvard Univ Boston MA USA 02115 AP

Subjects: TRANSCRIPTION FACTORS

Subjects: EYE DEVELOPMENT

Subjects: SEQUENCE RECOGNITION

Subjects: MISSENSE MUTATIONS

Subjects: NASAL DEVELOPMENT

Subjects: DEVELOPING CNS

Subjects: NUCLEIC-ACIDS

Subjects: MINOR-GROOVE

Subjects: EYELESS GENE

Subjects: ETS-DOMAIN

Source: GENES & DEVELOPMENT v.13 is.10 MAY 15 pp.1263-1275

Language: EN English

Author: Coignet, LJA

Author: Lima, CSP

Author: Min, T

Author: Streubel, B

Author: Swansbury, J

Author: Telford, N

Author: Swanton, S
Author: Bowen, A
Author: Nagai, M
Author: Catovsky, D
Author: Fonatsch, C
Author: Dyer, MJS

Title: Myeloid- and lymphoid-specific breakpoint cluster regions in chromosome band 13q14 in acute leukemia

Journal/Book Title: GENES CHROMOSOMES & CANCER

Year: 1999

Type: ARTICLE

Abstract: Abnormalities of chromosome band 13q14 occur in hematologic malignancies of all lineages and at all stages of differentiation. Unlike other chromosomal translocations, which are usually specific for a given lineage, the chromosomal translocation t(12; 13)(p12;q14) has been observed in both B-cell and T-cell precursor acute lymphoblastic leukemia (BCP-, TCP-ALL), in differentiated and undifferentiated acute myeloblastic leukemia (AM L), and in chronic myeloid leukemia (AML) at progression to blast crisis. The nature of these translocations and their pathologic consequences remain unknown. To begin to define the gene(s) involved on chromosome 13, we have performed fluorescence in situ hybridization (FISH) using a panel of YACs from the region, on a series of 10 cases of acute leukemia with t(12;13)(p12;q14) and 1 case each with "variant" translocations including t(12;13)(q21;q14), t(10;13)(q24;q14) and t(9;13)(p21;q14). In 8/13 cases/cell lines, the 13q14 break fell within a single 1.4 Mb CEPH MegaYAC. This YAC fell immediately telomeric of the forkhead (FKHR) gene, which is disrupted in the t(2;13)(q35;q14) seen in pediatric alveolar rhabdomyosarcoma. Seven of the 8 cases with breaks in this YAC were AML. In 4/13 cases, the 13q14 break fell within a 1.7-Mb YAC located about 3 Mb telomeric of the retinoblastoma (RBI) gene: all 4 cases were ALL. One case of myelodysplastic syndrome exhibited a break within 13q12, adjacent to the BRCA2 gene. These data indicate the presence of myeloid- and lymphoid-specific breakpoint cluster regions within chromosome band 13q14 in acute leukemia. (C) 1999 Wiley-Liss, Inc.

Corporate Source: Royal Marsden Hosp Sutton Surrey England

Corporate Source: Univ Vienna Vienna Austria

Corporate Source: Christie Hosp NHS Trust Manchester Lancs England M20

4BX AC

Corporate Source: Royal Free Hosp London England

Corporate Source: Kagawa Med Univ Kagawa Japan

Subjects: ACUTE LYMPHOBLASTIC-LEUKEMIA

Subjects: CHRONIC LYMPHOCYTIC-LEUKEMIA

Subjects: IN-SITU HYBRIDIZATION

Subjects: ETS-VARIANT GENE-6

Subjects: HEMATOLOGIC MALIGNANCIES

Subjects: ETV6

Subjects: FUSION

Subjects: TEL

Subjects: TRANSLOCATIONS

Subjects: DELETION

Source: GENES CHROMOSOMES & CANCER v.25 is.3 JUL pp.222-229

Language: EN English

Author: Horanyi, M

Author: Gumbel, J

Author: Witt, G

Author: Robertson, S

Title: Simulation of rocket-borne particle measurements in the mesosphere

Journal/Book Title: GEOPHYSICAL RESEARCH LETTERS

Year: 1999

Type: ARTICLE

Abstract: Nanometer-sized meteoric smoke particles and ice condensates are thought to influence the chemistry in the 80-120 km altitude region and to play an important role in the evolution of Polar Mesosphere Summer Echoes and Noctilucent Clouds. In this paper we show that aerodynamic perturbations introduced by a rocket payload complicate the analysis of dust measurements in this region. We analyze the flow of particles by applying a combined numerical simulation of flight aerodynamics and particle evolution. We show that for typical velocities of 500 - 1000 ms(-1), the detection efficiency drops below 50 % for smoke particles with radii 0.8-1.4 nm and for ice clusters with radii 2-5 nm, depending on the rocket's angle of attack. The particles are exposed to heating in the shock region, resulting in significant mass loss for ice condensates due to sublimation. Our simulations indicate that a substantial fraction of the expected nm

sized meteoric smoke particles could be detected with refined instrumentation.

Corporate Source: Univ Colorado Boulder CO USA 80309 AP
Corporate Source: Univ Stockholm Stockholm Sweden S-10691 BC
Corporate Source: Univ Colorado Boulder CO USA 80309 AP
Subjects: DUST PARTICLES
Subjects: ATMOSPHERES
Subjects: COAGULATION
Subjects: CLOUDS
Subjects: ICE
Source: GEOPHYSICAL RESEARCH LETTERS v.26 is.11 JUN 1
pp.1537-1540

Language: EN English

Author: Koyama, Y

Author: Baba, A

Title: Endothelin-induced protein tyrosine phosphorylation of cultured astrocytes: Its relationship to cytoskeletal actin organization

Journal/Book Title: GLIA

Year: 1999

Type: ARTICLE

Abstract: Endothelins (ETs) promote cytoskeletal actin reorganization of cultured astrocytes (Koyama and Baba, Neuroscience 61:1007-1016, 1994; Koyama and Baba, Glia 16:342-350, 1996). In this study, we examined the signal transduction involved in that activity of ETs. Immunoblot analysis with an anti-phosphotyrosine antibody showed that ET-3 (1 nM) increased tyrosine phosphorylation of 120 Kda and 70 Kda astrocytic proteins. The tyrosine phosphorylations of both proteins reached a maximum at 1 nM ET-3. In morphological examinations, ET-3 (1 nM) induced stress fibers, an organized F-actin structure, and focal adhesions in 0.5 mM dibutyryl cAMP (DBcAMP)-treated astrocytes within 30 min. Immunohistochemical staining of phosphotyrosine revealed that the newly formed focal adhesions possessed phosphotyrosine immunoreactivity. Phorbol 12-myristate 13 acetate (PMA, 100 nM), bradykinin (1 μ M), angiotensin II (100 nM), and A23187 (5 μ M) did not induce astrocytic stress fibers and had no obvious effects on tyrosine phosphorylation of 120 Kda and 70 Kda proteins. Tyrosine phosphorylation of astrocytic 120 Kda and 70 Kda proteins was stimulated by 1 mM sodium orthovanadate (VO4³⁻), a protein tyrosine phosphatase inhibitor. VO4³⁻ promoted reorganization of stress fibers and focal adhesions in DBcAMP-treated astrocytes. Neither chelation of intra- and extracellular Ca²⁺ nor pre-treatment with pertussis toxin (PTX) affected the ET-induced tyrosine phosphorylation and stress fiber formation in cultured astrocytes. These results suggest a relationship between cytoskeletal actin reorganization and the tyrosine phosphorylation of astrocytic proteins by ETs. GLIA 26:324-332, 1999. (C) 1999 Wiley-Liss, Inc.

Corporate Source: Osaka Univ Suita Osaka Japan 565 AP

Subjects: STRESS FIBER FORMATION
Subjects: SWISS 3T3 CELLS
Subjects: GROWTH-FACTOR
Subjects: SUBARACHNOID HEMORRHAGE
Subjects: ADP-RIBOSYLTRANSFERASE
Subjects: SIGNAL-TRANSDUCTION
Subjects: REACTIVE ASTROCYTES
Subjects: FOCAL ADHESIONS
Subjects: RAT ASTROCYTES
Subjects: KINASE

Source: GLIA v.26 is.4 JUN pp.324-332

Language: EN English

Author: Daganou, M

Author: Dimopoulou, I

Author: Alivizatos, PA

Author: Tzelepis, GE

Title: Pulmonary function and respiratory muscle strength in chronic heart failure: comparison between ischaemic and idiopathic dilated cardiomyopathy

Journal/Book Title: HEART

Year: 1999

Type: ARTICLE

Abstract: Objective-To compare pulmonary function and respiratory muscle strength in patients with ischaemic

and idiopathic dilated cardiomyopathy, well matched for indices of heart failure.

Abstract: Methods-The study involved 30 patients with ischaemic cardiomyopathy and 30 with idiopathic dilated cardiomyopathy. The groups were well matched for age, weight, and clinical severity of cardiac dysfunction as assessed by ejection fraction and the New York Heart Association functional class. There were more smokers in the ischaemic group ($p < 0.05$), but indices of pulmonary function were comparable.

Abstract: Results-Mean (SD) maximum static inspiratory pressure was lower in dilated cardiomyopathy than in ischaemic cardiomyopathy (73 (20) v 84 (22) cm H₂O, $p < 0.05$), as was the maximum static expiratory pressure (90 (20) v 104 (21) cm H₂O, $p < 0.05$).

Abstract: Conclusions-For a given degree of cardiac dysfunction, the respiratory muscles are weaker in patients with idiopathic dilated cardiomyopathy than in those with ischaemic cardiomyopathy.

Corporate Source: Onassis Cardiac Ctr Athens Greece 17674 AC

Corporate Source: Onassis Cardiac Ctr Athens Greece 17674 AC

Subjects: SKELETAL-MUSCLE

Subjects: ABNORMALITIES

Subjects: MYOPATHY

Subjects: WEAKNESS

Subjects: DYSPNEA

Source: HEART v.81 is.6 JUN pp.618-620

Language: EN English

Author: McDonald, JW

Author: Pilgram, TK

Title: Nuclear expression of p53, p21 and cyclin D1 is

increased in bronchioloalveolar carcinoma

Journal/Book Title: HISTOPATHOLOGY

Year: 1999

Type: ARTICLE

Abstract: Aims: The objectives of this study were: (1) to determine, using immunohistochemistry, the level of expression of the cell cycle factors p53, p21 and cyclin D1 in a group of bronchioloalveolar carcinomas (BACs), and to compare these data to relevant published data for lung carcinoma; (2) to determine if higher expression rates for these factors in BAC were associated statistically with advanced clinical stage, greater tumour size, tobacco abuse, and/or BAC subtype; (3) to seek, using Fisher's exact t-test and paired data groups, any significant associations within the expression data for p53, p21 and cyclin D1.

Abstract: Methods and results: A panel of monoclonal antibodies against p53, p21 and cyclin D1 was applied to 19 bronchioloalveolar carcinomas (17 surgical pathology cases and two autopsies) from the tissue archives of St. Louis University. These immunohistochemical stains were graded on a semiquantitative scale according to the prevalence of nuclear staining within the tumour (<10% positive cells = 0, 10-25% = 1+, 25-50% = 2+, 50-75% = 3+ and 75-100% = 4+). Six of 19 (32%) of BACs showed 1+ or greater p53 positivity, six of 19 (32%) showed 1+ or greater nuclear cyclin D1 positivity, and nine of 19 (47%) of BACs showed 1+ or greater p21 nuclear positivity. A statistically significant correlation was found between p53 and cyclin D1 expression ($P = 0.046$, Fisher's exact t-test), but not between p53 and p21, or between p21 and cyclin D1. No statistically significant association was found between the cell cycle factor expression data and subtype of BAC (mucinous vs. nonmucinous), tumour diameter, clinical stage or tobacco-use history.

Abstract: Conclusions: BACs show p53 immunostain positivity at a frequency similar to that published for p53 mutations in lung adenocarcinomas in general. Cyclin D1 and p21 nuclear expression characterizes a significant proportion of BACs, with cyclin D1 and p53 expression showing a statistically significant association. Aberrations in p53, p21, and cyclin D1 expression may be important in the development of a significant proportion of BACs.

Corporate Source: St Louis Univ St Louis MO USA 63110 AP

Corporate Source: Washington Univ St Louis MO USA 63110 AP

Subjects: SQUAMOUS-CELL CARCINOMAS

Subjects: PROTEIN EXPRESSION

Subjects: LUNG-CANCER

Subjects: GENE

Subjects: DIFFERENTIATION

Subjects: OVEREXPRESSION

Subjects: ADENOCARCINOMA

Subjects: ASSOCIATION

Subjects: ONCOGENE

Subjects: STAGE

Source: HISTOPATHOLOGY v.34 is.5 MAY pp.439-446

Language: EN English

Author: Arnould, JP

Author: Pfohl-Leszkowicz, A

Author: Bach, V

Author: Libert, JP
Author: Belegaud, J

**Title: Biological monitoring exposure of workers from plant
producing carbon electrodes: quantification of
benzo[a]pyrene DNA-adducts in leukocytes, by a
P-32-postlabelling method and an immunoassay**

Journal/Book Title: HUMAN & EXPERIMENTAL TOXICOLOGY

Year: 1999

Type: ARTICLE

Abstract: The levels of benzo[a]pyrene were monitored for blood DNA-benzo[a]pyrene adducts in 17 workers from a plant producing carbon electrodes, with high exposure to benzo[a]pyrene (575-902-1149 ng m(-3)). Two different techniques, a P-32-postlabelling method and a competitive immunoassay using polyclonal antibodies obtained from rabbits immunised with DNA modified by benzo [a]pyrene-trans-7,8-dihydrodiol-9,10-epoxide were used. For each worker, urinary 1-hydroxypyrene, a potential indicator of exposure to polycyclic aromatic hydrocarbons, was measured. The effect of tobacco by urinary cotinine measurement was also considered. The postlabelling and immunoassay detection limits for DNA-benzo[a]pyrene adducts were respectively 0.15 and 10 fmol 50 µg(-1) of DNA. The results obtained by the two methods demonstrated a good detection of DNA-benzo[a]pyrene adducts, but no direct relationship between the quantity of adducts and the concentration of benzo[a]pyrene in air-borne was noted in the studied plant. **Abstract:** The levels of DNA-benzo[a]pyrene adducts obtained by immunoassay were significantly higher than those obtained by the P-32-postlabelling ($P < 0.001$). For several workers, variations due to professional or non professional factors must be taken into account in interpreting the results. In conclusion, the two methods used proved very efficient in determining DNA-benzo[a]pyrene adducts, and may be useful in monitoring human exposure to known and previously unidentified environmental genotoxic agents.

Corporate Source: Fac Pharm Amiens France F-80037 BC

Corporate Source: Ecole Natl Super Agron Toulouse Castanet Tolosan
France F-31326 BC

Corporate Source: Unite Rech Adaptat Physiol & Comportementales Amiens
France F-80036 BC

Subjects: POLYCYCLIC AROMATIC-HYDROCARBONS

Subjects: WHITE BLOOD-CELLS

Subjects: URINARY-EXCRETION

Subjects: COAL-TAR

Subjects: MOLECULAR EPIDEMIOLOGY

Subjects: MANUFACTURING PLANT

Subjects: CARCINOGEN EXPOSURE

Subjects: RISK ASSESSMENT

Subjects: HUMAN CANCER

Subjects: 1-HYDROXYPYRENE

Source: HUMAN & EXPERIMENTAL TOXICOLOGY v.18 is.5 MAY
pp.314-321

Language: EN English

Author: Ferrera, A

Author: Olivo, A

Author: Alaez, C

Author: Melchers, WJG

Author: Gorodezky, C

**Title: HLA DQA1 and DQB1 loci in Honduran women with cervical
dysplasia and invasive cervical carcinoma and their
relationship to human papillomavirus infection**

Journal/Book Title: HUMAN BIOLOGY

Year: 1999

Type: ARTICLE

Abstract: Molecular and epidemiological studies have demonstrated that certain types of human papillomavirus (HPV), mainly HPV-16 and HPV-18, are the primary causes of cervical cancer and its precursor lesions; there is now evidence for a clear association with specific HLA class I and class II loci contributing independently to the expression of cervical cancer. Among Honduran women carcinoma of the cervix is the most common type of cancer, and infections with high-risk HPV types are highly prevalent. To study the interactive role of viral-host genetics, we performed PCR amplification of DNA and sequence-specific oligonucleotide probe typing on cervical scrapes from 49 women [24 with cervical intraepithelial neoplasia stage III or cervical cancer (severe cases) and 25 with stage I or II cervical intraepithelial neoplasia (mild cases)] and 75 control subjects to look for possible associations between HPV and HLA class II DQA1 and DQB1 alleles in the development of dysplasias and invasive cancer. This analysis revealed a predominance of HLA-DQA1

*0301 among severe-case patients [relative risk (RR) = 3.45, $p = 0.008$], whereas DQA1*0501 was negatively associated (RR = 0.30, $p = 0.03$), suggesting a protective effect of this allele. HPV typing showed a decreased relative risk among the HPV-16 or HPV-18 carrying patients and other HPV-related positive patients in the presence of DQB1*0602 compared with positive control subjects ($p = 0.04$). No statistically significant allele frequency difference was observed between mild dysplasia cases and control subjects. The results suggest that DQA1*03011, which is in linkage disequilibrium with all HLA-DR4 alleles, confers an increased risk for severe cervical dysplasia and invasive cancer, whereas DQA1*0501, which is in several DR52 haplotypes, has a protective effect. Furthermore, specific HLA-DQB1 sequences may be important in determining the immune response to HPV peptides and may affect the risk for cervical cancer after HPV infection in mestizo Honduran women.

Corporate Source: SSA Mexico City DF Mexico 11340 AC

Corporate Source: Univ Nacl Autonoma Honduras Tegucigalpa Honduras

Corporate Source: Univ Nijmegen Nijmegen Netherlands

Subjects: POLYMERASE CHAIN-REACTION

Subjects: SQUAMOUS-CELL CARCINOMA

Subjects: INTRAEPITHELIAL NEOPLASIA

Subjects: CANCER

Subjects: RISK

Subjects: ASSOCIATIONS

Subjects: ALLELES

Subjects: FREQUENCY

Subjects: COLOMBIA

Subjects: SPAIN

Source: HUMAN BIOLOGY v.71 is.3 JUN pp.367-379

Language: EN English

Author: Brown, RB

Author: Keegan, D

Title: Humor in the hotel kitchen

Journal/Book Title: HUMOR-INTERNATIONAL JOURNAL OF HUMOR RESEARCH

Year: 1999

Type: ARTICLE

Abstract: It has been claimed that humor can provide organizations with a set of skills that will enable employees to remain receptive to change, relieve tension, and contribute to reducing the annual \$200 billion cost to U.S. industry for treating maladaptive stress (more than the cost of the effects of smoking).

Abstract: Recently, in Britain, a worker was awarded pound 6,000 for constructive dismissal. The reason was that he is an Irishman who refused to accept "paddy" jokes in his workplace. Go-author Dermott Keegan has been a hotel manager for nearly, twenty years, and had overheard similar jokes in his kitchen. This incident formed the stimulus for the research on which the paper is based.

Abstract: We aimed to investigate the role that humor plays in an extremely important hotel department-the kitchen-and to examine the effects humor has in this department in such matters as staff retention and training. The ultimate aim of the research was practical-by viewing the hotel kitchen from the angle of humor, Keegan hoped to improve the smooth running of this very significant department.

Subjects: JOKES

Source: HUMOR-INTERNATIONAL JOURNAL OF HUMOR RESEARCH v.12

is.1 JAN pp.47-70

Language: EN English

Author: Biselli, R

Author: Fortini, M

Author: Matricardi, PM

Author: Stroffolini, T

Author: D'Amelio, R

Title: Incidence of Helicobacter pylori infection in a cohort of Italian military students

Journal/Book Title: INFECTION

Year: 1999

Type: ARTICLE

Abstract: Prevalence and incidence of Helicobacter pylori infection among 250 Italian military students were studied using specific IgG antibodies. Subjects susceptible at enrollment were evaluated during a 10-month follow-up period, when two serum samples were collected after 5 and 10 months, respectively. Samples were also analyzed for anti-CagA (a protein associated with virulent H. pylori strains) IgG antibodies. Finally, spectrotypic analysis by isoelectric focusing and reverse blotting (IEFRB) was performed in the majority of positive samples. Forty-three out of 250 (17.2%) were positive at the time of enrollment, a seroprevalence rate very similar to that observed in a larger Italian military

population 5 years earlier. Among the 207 susceptible subjects, two seroconverted at 5 months after enrollment; they were still positive at the end of follow-up (incidence rate of 1.16 per 100 person-years of exposure). This data suggests a spread of *H. pylori* in the Italian military population that is not negligible. Nearly all anti-*H. pylori*-positive subjects were also CagA antibody positive (agreement percentage: 97.6%; $K = 0.91$), suggesting that the large majority of *H. pylori* strains were of the virulent type. Sixty-four percent of positive sera presented an oligoclonal spectrotypic, which seems to be a hallmark of humoral immune response to *H. pylori*.

Corporate Source: Aeronaut Mil Italiana Rome Italy I-00040 BC

Corporate Source: Ist Super Sanita Rome Italy I-00161 BC

Corporate Source: Univ Catanzaro Magna Graecia Catanzaro Italy I-88100
BC

Corporate Source: Mil Hlth Dept Rome Italy I-00184 BC

Subjects: HUMORAL IMMUNE-RESPONSE

Subjects: PEPTIC-ULCER DISEASE

Subjects: SPECTROTYPE ANALYSIS

Subjects: UNITED-STATES

Subjects: HEPATITIS-A

Subjects: PREVALENCE

Subjects: RISK

Subjects: ANTIBODIES

Subjects: CAGA

Subjects: EPIDEMIOLOGY

Source: INFECTION v.27 is.3 MAY-JUN pp.187-191

Language: EN English

Author: Mengersen, KL

Author: Merrilees, MJ

Author: Tweedie, RL

Title: Environmental tobacco smoke and ischaemic heart

disease: a case study in applying causal criteria

Journal/Book Title: INTERNATIONAL ARCHIVES OF OCCUPATIONAL AND
ENVIRONMENTAL HEALTH, S

Year: 1999

Type: REVIEW

Abstract: We use Bradford Hill criteria to synthesize the biological and epidemiological literature so as to assess formally whether ischaemic heart disease (IHD) is caused by exposure to environmental tobacco smoke (ETS). For the general population we find, at best, weak support for causality: of nine tests, one (biological plausibility) is supported, though not unarguably; three (strength, consistency, specificity) fail; and five (biological gradient, experimental evidence, temporality, coherence, analogy) have insufficient data for clear evaluation. For the population with pre-existing IHD the biological support is possibly stronger. We identify three areas for future research: epidemiological studies of those subpopulations with pre-existing IHD; evaluation of the nature of vessel wall thickenings occurring in experimental studies; and long-term animal studies of initiation of IHD, including direct assessment of effects on the accumulation of lipid in vessel walls, at appropriate ETS levels.

Corporate Source: Queensland Univ Technol Brisbane Qld Australia 4001

AP

Corporate Source: Univ Auckland Auckland New Zealand 1 AC

Corporate Source: Colorado State Univ Ft Collins CO USA 80523 AP

Subjects: CORONARY-ARTERY DISEASE

Subjects: SIDESTREAM CIGARETTE-SMOKE

Subjects: AMERICAN-CANCER-SOCIETY

Subjects: HEALTHY-YOUNG ADULTS

Subjects: PASSIVE SMOKING

Subjects: LUNG-CANCER

Subjects: NONSMOKING WOMEN

Subjects: SHORT-TERM

Subjects: EXERCISE PERFORMANCE

Subjects: TRANSDERMAL NICOTINE

Source: INTERNATIONAL ARCHIVES OF OCCUPATIONAL AND
ENVIRONMENTAL HEALTH v.72 is.7 MAY pp.R1-R40

Language: EN English

Author: Kolstad, HA

Author: Bonde, JP

Author: Spano, M
Author: Giwerzman, A
Author: Zschiesche, W
Author: Kaae, D
Author: Larsen, SB
Author: Roeleveld, N

Title: Change in semen quality and sperm chromatin structure following occupational styrene exposure

Journal/Book Title: INTERNATIONAL ARCHIVES OF OCCUPATIONAL AND ENVIRONMENTAL HEALTH

Year: 1999

Type: ARTICLE

Abstract: Objectives: Organic solvents have been suspected to exert detrimental effects on human spermiogenesis. Styrene, which is both mutagenic and neurotoxic, was selected as a suitable organic solvent for further assessment of a possible effect on semen quality and sperm DNA damage. Subjects and methods: Semen samples were collected from 23 reinforced plastics workers at the time of employment and after 6 months of styrene exposure and from 21 nonexposed farmers. Intra-individual changes in conventional semen parameters and sperm-DNA denaturation patterns were related to the internal dose of styrene exposure as measured by postshift urinary mandelic acid. Results: A statistically significant decline in sperm density was seen during styrene exposure from 63.5 to 46.0 million sperm/ml, whereas no decline was seen in the nonexposed subjects. The total sperm count was almost halved from an initial value of 175 million sperm/ejaculate. However, no relationship was apparent when the sperm parameters were related to internal levels of exposure. However, an exposure-response relationship was shown for DNA-denaturation patterns, but the numbers were small. Conclusion: A declining sperm count following styrene exposure is suggested. However, the findings of the internal and external comparisons are inconsistent, and this may be due to the high intraindividual variability of semen parameters and the limited study size but may also be attributable to a weak internal exposure gradient. Spermatogenesis may be vulnerable to styrene exposure. However, due to the small numbers these findings are only preliminary.

Corporate Source: Aarhus Univ Hosp Aarhus Denmark C AC

Corporate Source: ENEA CR Casaccia Rome Italy

Corporate Source: Rigshosp Copenhagen Denmark DK-2100 BC

Corporate Source: Univ Erlangen Nurnberg Nurnberg Germany

Corporate Source: Univ Nijmegen Nijmegen Netherlands

Subjects: ETHYLENE-GLYCOL ETHERS

Subjects: DRY-CLEANING WORKERS

Subjects: PERCHLOROETHYLENE EXPOSURE

Subjects: REPRODUCTION

Subjects: FERTILITY

Subjects: TOXICITY

Source: INTERNATIONAL ARCHIVES OF OCCUPATIONAL AND ENVIRONMENTAL HEALTH v.72 is.3 MAY pp.135-141

Language: EN English

Author: Odland, JO

Author: Tchachtchine, VP

Author: Bykov, V

Author: Fiskebeck, PE

Author: Lund, E

Author: Thomassen, Y

Author: Nieboer, E

Title: Critical evaluation of medical, statistical, and occupational data sources in the Kola Peninsula of Russia pertinent to reproductive health studies

Journal/Book Title: INTERNATIONAL ARCHIVES OF OCCUPATIONAL AND ENVIRONMENTAL HEALTH

Year: 1999

Type: ARTICLE

Abstract: Background: The feasibility study described herein was prompted by a report in 1992 of possible reproductive and developmental health concerns among female workers in a Russian nickel refinery. Objective: The primary goal was to ascertain whether medical, statistical, and occupational data bases could be accessed for information about the pregnancy histories, occupational histories, and life-style factors of the women affected. Methods: The project was facilitated by construction of a registry of all births in three towns with a nickel refinery and verification of its contents against patients' records obtained from hospital delivery and gynecology departments and community polyclinics.

Municipal Registration Board, Regional Health Statistics Board, and nickel company records were also reviewed. Results: Reproductive/developmental outcome information and workplace histories were acceptable. Sample-size calculations indicated that a cohort or cross-sectional study would be amenable and suitable for the detection of an excess risk for spontaneous abortion with adequate statistical significance and power. Such investigations would need to be supplemented by workplace environmental/biological monitoring assessments for evaluation of exposure to occupational hazardous factors and a worker's questionnaire to obtain information about life-style factors. A case-control design is recommended for the study of congenital defects. Conclusions: A well-designed, comprehensive epidemiology study is technically feasible because of the availability of a favorable pool of study subjects, reproductive/developmental outcome data, information to control for major confounders, and suitable occupational records.

Corporate Source: Univ Tromso Tromso Norway N-9037 BC

Corporate Source: Kola Res Lab Occupat Hlth Kirovsk Russia

Corporate Source: Dept Environm Affairs Vadso Norway

Corporate Source: Natl Inst Occupat Hlth Oslo Norway

Corporate Source: McMaster Univ Hamilton ON Canada

Corporate Source: McMaster Univ Hamilton ON Canada

Subjects: NICKEL

Subjects: TOXICITY

Subjects: MALFORMATIONS

Subjects: EXPOSURE

Source: INTERNATIONAL ARCHIVES OF OCCUPATIONAL AND ENVIRONMENTAL HEALTH v.72 is.3 MAY pp.151-160

Language: EN English

Author: Cheng, L

Author: Sturgis, EM

Author: Eicher, SA

Author: Char, D

Author: Spitz, MR

Author: Wei, QY

Title: Glutathione-S-transferase polymorphisms and risk of squamous-cell carcinoma of the head and neck

Journal/Book Title: INTERNATIONAL JOURNAL OF CANCER

Year: 1999

Type: ARTICLE

Abstract: Differences in genetic susceptibility to tobacco-induced carcinogenesis appear to modulate an individual's risk of squamous-cell carcinoma of the head and neck (SCCHN). Risk for SCCHN may be associated with the null alleles of the carcinogen-metabolizing genes glutathione-S-transferase (GST) T1 and GSTM1. In this study, we evaluated the association between GSTM1 and GSTT1 null genotypes and risk of SCCHN in a matched case-control study of 162 patients with SCCHN and 315 healthy controls. Our results showed that 53.1% of cases and 42.9% of controls were null for GSTM1, whereas 32.7% of cases and 17.5% of controls were null for GSTT1 ($p < 0.05$ and $p < 0.001$, respectively). Furthermore, 19.8% of cases but only 7.9% of controls were null for both genes ($p < 0.001$). Multivariate analysis using logistic regression models, including age, sex, ethnicity, smoking status, alcohol status and GST genotypes, showed that both of these genotypes remained independent risk factors for disease [adjusted odds ratios (ORs) = 1.50 and 2.27, respectively; 95% confidence intervals (CIs) = 1.01-2.23 and 1.43-3.60, respectively]. When the genotypes were divided into neither null, either null or both null, there was a dose-response relationship (adjusted OR = 1.50, 95% CI = 0.98-2.30) for the either-null group and (adjusted OR = 3.64, 95% CI = 1.94-6.84) for the both-null group ($p < 0.001$, trend test). Our findings suggest that the GSTM1 and GSTT1 null genotypes are independent risk factors for SCCHN and markers for genetic susceptibility to tobacco-induced carcinogenesis. *Int. J. Cancer (Pred. Oncol.)* 84:220-224, 1999. (C) 1999 Wiley-Liss, Inc.

Corporate Source: Univ Texas Houston TX USA 77030 AP

Corporate Source: Univ Texas Houston TX USA 77030 AP

Subjects: LARYNX CANCER

Subjects: DIOL EPOXIDE

Subjects: GENOTYPES

Subjects: DNA

Subjects: M1

Subjects: SUSCEPTIBILITY

Subjects: SENSITIVITY

Subjects: ENZYMES

Subjects: ADDUCT

Subjects: GSTT1

Source: INTERNATIONAL JOURNAL OF CANCER v.84 is.3 JUN 21 pp.220-224

Language: EN English
Author: Satia, JA
Author: Patterson, RE
Author: Herrero, R
Author: Jin, F
Author: Dai, Q
Author: King, IB
Author: Chen, C
Author: Kristal, AR
Author: Prentice, RL
Author: Rossing, MA

**Title: Study of diet, biomarkers and cancer risk in the
United States, China and Costa Rica**

Journal/Book Title: INTERNATIONAL JOURNAL OF CANCER

Year: 1999

Type: ARTICLE

Abstract: One striking paradox in epidemiologic research is the strong association between diet and cancer in ecologic studies compared with the weaker associations reported in many within-country case-control and cohort studies. However, most ecologic studies have relied on indirect measures of dietary intake, such as food disappearance data. The objectives of our study were to assess the feasibility of collecting dietary and biomarker data from individuals living in countries having markedly different dietary patterns and cultures and to examine the magnitude of the between-country variation in their measurement. Adults surveyed in Shanghai (China), Costa Rica and King County (Washington, USA) completed a 24-hr dietary recall, a cancer risk factor survey, and provided a blood sample. We analyzed a subset of the blood specimens for vitamins C, E, carotenoids and phospholipid fatty acids. We observed substantial differences in nutrient intakes and in mean plasma concentrations of dietary biomarkers across the study populations. For example, King County participants had the highest daily intake of vitamin C (mean 78.3 +/- 12.2 mg compared with 42.6 +/- 38.3 mg in Shanghai and 34.8 +/- 43.8 mg in Costa Rica). The mean plasma vitamin C level in King County was also the highest of the 3 study sites: 927.9 +/- 43.9 mu g/dl in King County, 585.7 +/- 35.9 mu g/dl in Shanghai and 461.1 +/- 33.1 mu g/dl in Costa Rica. Plasma trans fatty acids (a biomarker of a diet high in hydrogenated fats) were highest in King County and lowest in Shanghai. (C) 1999 Wiley-Liss, Inc.

Corporate Source: Fred Hutchinson Canc Res Ctr Seattle WA USA 98109

AP

Corporate Source: Univ Washington Seattle WA USA 98195 AP

Corporate Source: Int Agcy Res Canc Lyon France F-69372 BC

Corporate Source: Shanghai Canc Inst Shanghai Peoples R China

Subjects: TRANS-FATTY-ACIDS

Subjects: PROSTATE

Subjects: RETINOL

Subjects: BREAST

Source: INTERNATIONAL JOURNAL OF CANCER v.82 is.1 JUL 2
pp.28-32

Language: EN English
Author: De Stefani, E
Author: Deneo-Pellegrini, H
Author: Boffetta, P
Author: Mendilaharsu, M

**Title: Meat intake and risk of squamous cell esophageal
cancer: A case-control study in Uruguay**

Journal/Book Title: INTERNATIONAL JOURNAL OF CANCER

Year: 1999

Type: ARTICLE

Abstract: In order to examine the relationship between different types of meat and squamous cell cancer of the esophagus, a case-control study was carried out in Uruguay. Eighty-two cases and 248 hospitalized controls were frequency-matched on age, sex, residence and urban/rural status. All patients responded to a detailed questionnaire, which included a food-frequency form for 64 food items representative of the usual Uruguayan diet. Whereas increases in risk were observed for high intake of salted meat [odds ratio (OR) 2.5, 95% confidence interval (CI) 1.1-5.4] and lamb (OR 2.1, 95% CI 1.1-4.2), beef from cow was inversely associated with the risk of esophageal cancer (OR 0.4, 95% CI 0.2-0.9). Also, polyunsaturated fat from meat was associated with an increased risk (OR 3.2, 95% CI 1.0-9.8). Finally, total meat intake was not associated with squamous cell cancer of the esophagus. (C) 1999 Wiley-Liss, Inc.

Corporate Source: Registro NacI Canc Montevideo Uruguay
Corporate Source: Int Agcy Res Canc Lyon France F-69372 BC

Subjects: MATE DRINKING

Subjects: HETEROCYCLIC AMINES

Subjects: BLACK-MEN

Subjects: DIET

Subjects: ALCOHOL

Subjects: TOBACCO

Subjects: WASHINGTON

Subjects: CHINA

Subjects: HOT

Subjects: DC

Source: INTERNATIONAL JOURNAL OF CANCER v.82 is.1 JUL 2
pp.33-37

Language: EN English

Author: Chow, WH

Author: Swanson, CA

Author: Lissowska, J

Author: Groves, FD

Author: Sobin, LH

Author: Nasierowska-Guttmejer, A

Author: Radziszewski, J

Author: Regula, J

Author: Hsing, AW

Author: Jagannatha, S

Author: Zatonski, W

Author: Blot, WJ

**Title: Risk of stomach cancer in relation to consumption of
cigarettes, alcohol, tea and coffee in Warsaw, Poland**

Journal/Book Title: INTERNATIONAL JOURNAL OF CANCER

Year: 1999

Type: ARTICLE

Abstract: To identify reasons for the high incidence rates of stomach cancer in Poland, we conducted a population-based case-control study in Warsaw. Cases were residents aged 21 to 79 years who were newly diagnosed with stomach cancer between March 1, 1994, and April 30, 1997. Controls were randomly selected from Warsaw residents registered at the nationwide Polish Electronic System of Residence Evidency, frequency-matched to cases by age and sex. Information on demographic characteristics; consumption of cigarettes, alcohol, tea and coffee; diet; medical history; family history of cancer; occupational history; and living conditions during adolescence was elicited by trained interviewers using a structured questionnaire. Included were 464 cases (90% of eligible) and 480 controls (87% of eligible). Among men, the risk of stomach cancer was significantly elevated among current smokers (OR = 1.7, 95% CI = 1.1-2.7) but not among former smokers. The excess risk was largely confined to long-term and heavy smokers, with significant 2-fold excess risk among men who smoked 40 or more pack-years. Among women, an 80% increase in risk was observed in both current and former smokers but dose-response trends were less consistent than among men. Alcohol consumption was not clearly related to risk, and no association was found for drinking regular coffee or herbal tea or using milk/cream in coffee or tea. A significant reduction in risk was linked to daily tea drinking among women, but not among men. Our findings confirm an association with cigarette smoking, which is estimated to account for approximately 20% of stomach cancers diagnosed among Warsaw residents during the study period. Published 1999 Wiley-Liss, Inc.(dagger).

Corporate Source: NCI Bethesda MD USA 20892 AP

Corporate Source: Ctr Canc Warsaw Poland

Corporate Source: M Sklodowska Curi Inst Oncol Warsaw Poland

Corporate Source: Armed Forces Inst Pathol Washington DC USA 20306

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Corporate Source: Ctr Canc Warsaw Poland

Corporate Source: Ctr Canc Warsaw Poland

Corporate Source: Westat Inc Rockville MD USA

Corporate Source: Int Epidemiol Inst Rockville MD USA

Subjects: N-NITROSO COMPOUNDS

Subjects: GASTRIC-CANCER

Subjects: PROSPECTIVE COHORT

Subjects: FOLLOW-UP

Subjects: SMOKING

Subjects: TOBACCO
Subjects: POPULATION
Subjects: CARDIA
Subjects: ADENOCARCINOMAS
Subjects: ESOPHAGUS
Source: INTERNATIONAL JOURNAL OF CANCER v.81 is.6 JUN 11
pp.871-876

Language: EN English
Author: Thomas, CS
Author: Cherian, G
Author: Abraham, MT
Author: Hayat, NJ
Author: Lulu, AR
Author: Bisharatullah, MS
Author: Cherian, S
**Title: Clinical and angiographic features in patients under
35 years with a first Q wave acute myocardial
infarction**

Journal/Book Title: INTERNATIONAL JOURNAL OF CARDIOLOGY

Year: 1999

Type: ARTICLE

Abstract: Sixty patients less than 35 years with a first Q wave acute myocardial infarction were prospectively studied to evaluate their features, risk factors and evidence of any viral infection. Typical chest pain was present in 98.3% with Q waves and ST segment elevation in all. None had hypotension or cardiogenic shock. Smoking was the most common risk factor (81.7%). Mean total cholesterol was 5.74 (+/-1.42) mmol/l. History of a viral illness was present in 28.3%, severe emotional stress in 21.7% and exhausting physical activity in 18.3%. Mean left ventricular diastolic and end systolic volumes were increased (90.11 +/-22.5 ml/m(2)) and (46.62 +/-20.46 ml/m(2)), respectively. The ejection fraction was depressed (49.71 +/-1.6%). Triple vessel disease was seen only in 6.8 and 26.7% had insignificant or no coronary artery disease. Left anterior descending artery was most frequently involved (66%). None had left main involvement. Coronary ectasia was present in 11.7%, intracoronary thrombus in 28.3% and 40% had collaterals. Patients with no significant disease had no diabetes, a smaller number had a raised total cholesterol or smoked and had a lower ejection fraction. Patients from the Indian subcontinent who had fewer conventional risk factors, had more severe disease than those from the Arab world suggesting that other etiological factors need investigation. (C) 1999 Elsevier Science Ireland Ltd. All rights reserved.

Corporate Source: Fac Med Safat Kuwait 13110 AC

Corporate Source: Minist Publ Hlth Safat Kuwait 13110 AC

Subjects: CORONARY-ARTERY-DISEASE

Subjects: YOUNG-ADULTS

Subjects: RISK FACTOR

Subjects: INFECTION

Subjects: PATHOGENESIS

Subjects: PROGNOSIS

Subjects: SMOKING

Subjects: THERAPY

Subjects: SURGERY

Subjects: TIME

Source: INTERNATIONAL JOURNAL OF CARDIOLOGY v.69 is.3 JUN 1
pp.263-270

Language: EN English
Author: Morzel, M
Author: Sheehan, EM
Author: Delahunty, CM
Author: Arendt, EK
**Title: Sensory evaluation of lightly preserved salmon using
free-choice profiling**

Journal/Book Title: INTERNATIONAL JOURNAL OF FOOD SCIENCE AND TECHNOLOGY

Year: 1999

Type: ARTICLE

Abstract: In order to characterise a novel fermented salmon product, sensory evaluation by free-choice profiling

was undertaken on three different types of salmon products (smoked salmon, gravlax and fermented salmon). Assessors could easily discriminate among all three types of products and common attributes were isolated from the set of individual assessments. Discrimination was made according to the appearance, odour and flavour attributes, while no clear consensus on texture was observable. The first discrimination factor between all products was the presence/absence of a smoky character. The novel fermented salmon was discriminated from gravlax as it appeared to have a distinct sour/acidic odour and flavour.

Corporate Source: Natl Univ Ireland Univ Coll Cork Cork Ireland

Corporate Source: Natl Univ Ireland Univ Coll Cork Cork Ireland

Corporate Source: Natl Univ Ireland Univ Coll Cork Cork Ireland

Subjects: FISH

Source: INTERNATIONAL JOURNAL OF FOOD SCIENCE AND TECHNOLOGY

v.34 is.2 APR pp.115-123

Language: EN English

Author: Merivee, E

Author: Rahi, M

Author: Luik, A

Title: Antennal sensilla of the click beetle, *Melanotus villosus* (Geoffroy) (Coleoptera : Elateridae)

Journal/Book Title: INTERNATIONAL JOURNAL OF INSECT MORPHOLOGY & EMBRYOLOGY

Year: 1999

Type: ARTICLE

Abstract: The typology, number and placement of antennal sensilla of the click beetle *Melanotus villosus* (Geoffroy) (Coleoptera: Elateridae) were studied using scanning electron microscopy. On both the males and females the antennae are made up of the scape, pedicel and nine flagellomeres. Two types of basiconic sensilla, three types of trichoid sensilla, one type of styloconic sensilla, one type of chetoid sensilla, dome-shaped sensilla, grooved pegs, and Bohm sensilla all appear on the antennae of the beetles of both sexes, with the exception of trichoid sensilla type II, whose large number (average of 1635 hairs per antenna) was found only in male beetles. Sensilla trichodea type II evidently respond to the sex pheromone produced by the female beetle. Unlike the other two click beetles, studied up till now, *Agriotes obscurus* and *Limonius aeruginosus*, the trichoid and basiconic sensilla of *M. villosus*, whose proven or assumed function is olfactory, are located predominantly on the flagellomeres' ventral extensions. It is assumed that the placement of the olfactory sensilla, mainly on the ventral side of *M. villosus*'s antennae, and their more or less even distribution on the flagellomeres, can be seen as morphological adaptation of this species of insect, whose specific behavioural reaction of olfactory searching is flying, both before and after contact with an odour plume. (C) 1999 Elsevier Science Ltd. All rights reserved.

Corporate Source: Estonian Agr Univ Tartu Estonia EE-2400 BC

Corporate Source: Estonian Agr Univ Tartu Estonia EE-2400 BC

Subjects: PHEROMONE-SENSITIVE SENSILLA

Subjects: CIGARETTE BEETLE

Subjects: MORPHOLOGY

Subjects: LEPIDOPTERA

Subjects: ULTRASTRUCTURE

Subjects: SCOLYTIDAE

Subjects: ANOBIIDAE

Subjects: FEMALE

Subjects: MOTH

Source: INTERNATIONAL JOURNAL OF INSECT MORPHOLOGY & EMBRYOLOGY v.28 is.1-2 JAN-APR pp.41-51

Language: EN English

Author: Reatto, L

Author: Galli, DE

Title: What is a roton?

Journal/Book Title: INTERNATIONAL JOURNAL OF MODERN PHYSICS B

Year: 1999

Type: ARTICLE

Abstract: Many models of a roton in superfluid He-4 have been proposed over the years but no general consensus has been reached yet on the nature of such excitation. We present a number of new results relating to this question. We have developed an accurate representation of the wave function of such excitation which is based on a shadow function. This allows to treat the short range backflow effects in a non perturbative way. The theory gives results in quantitative agreement with experiment. Starting from such eigenstates of momentum we build wave-packets and study